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VOL. II.

No. 1.

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## A PROTO-IONIC CAPITAL FROM THE SITE OF NEANDREIA.

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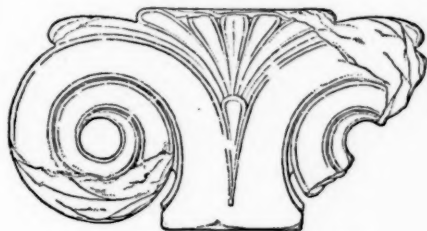


FIG. 1.—*Present condition of the block.*

### I.

This capital,—the most primitive memorial of the Greek Ionic style as yet brought to light,—was found by the writer, Sept. 24, 1882, upon the summit of Mount Chigri, in the Troad. Chigri is midway between Assos and Ilion, opposite Tenedos, and ten kilometres from the coast of the Aegean. The extensive ruins upon the site are, as will be shown, in all probability those of the ancient Neandreia. They have never been disturbed by excavations, and for more than 2,000 years this remote and precipitous height has been uninhabited. During previous surveys, in 1881 and the spring of 1882, no sculptured stones or architectural members were to be seen above the surface of the ground. But in the summer of the latter

year Turkish masons from the neighboring village of Yailadjyq, in search of squared building-stones, had dug a shallow trench within the city enclosure, exposing a corner of this block, which escaped destruction because of its irregular shape. It was easily freed from the soil, and was afterwards removed by Mr. Frank Calvert to the farm of Akchi-Kieui (Thymbra), where it was carefully examined and drawn. Together with it were discovered various fragments of archaic terra-cotta,—portions of a leaved kyma, decorated with a dark purple and black glaze like that found upon the most ancient terra-cottas of Sicily.

The stone is a fine-grained volcanic tufa, of a light reddish-gray color, obtained from a formation occurring in various parts of the western and southern Troad. At Assos this material is employed only in the oldest works, such as the lion's head which formed one of the gargoyles of the chief temple,<sup>1</sup> and a scroll believed to be part of an akroterion of the same building. Tufa is never found among later remains, and thus bears the same relation to the archaic architecture of the Troad as poros does to that of the Peloponnesos and Sicily. The first Greek stone-cutters required a material more easily worked than andesite, or even marble, and made up for the roughness of the stone by priming the surface with stucco and painting it with body color.

The capital remains in a state of preservation so good, that no doubt can exist concerning any detail of the design. Some of the corners have been split off, nearly half of one of the volutes being missing; but in view of the friable nature of the tufa, and its long exposure to the weather, the sharpness of the remaining tooled edges is surprising (*fig. 1*). The building to which the capital belonged must have been a ruin twenty-two centuries ago, and the block, when found, was not protected by any great depth of earth; yet the surface has not been at all affected by a decomposition like that which has so obliterated many of the sculptures and mouldings of the harder and coarser stone used at Assos.

The excellence of the design can have resulted only from an acquaintance with many spiral prototypes; and the admirable character of the technical execution is proof of a long practice in the

<sup>1</sup> Now in the Boston Museum of Fine Arts: No. S. 1162. Cf. the writer's *Report on the investigations at Assos, 1881*. Boston, 1882, p. 94, pl. 12.

carving of similar details. The capitals of the later ages of Greek art are of a higher and more organic development, better serving in æsthetic respects as functional members of the columnar system; but they are rarely of better proportion, or of a more firm and graceful outline (*fig. 2*). Too much emphasis cannot be laid upon the fact,

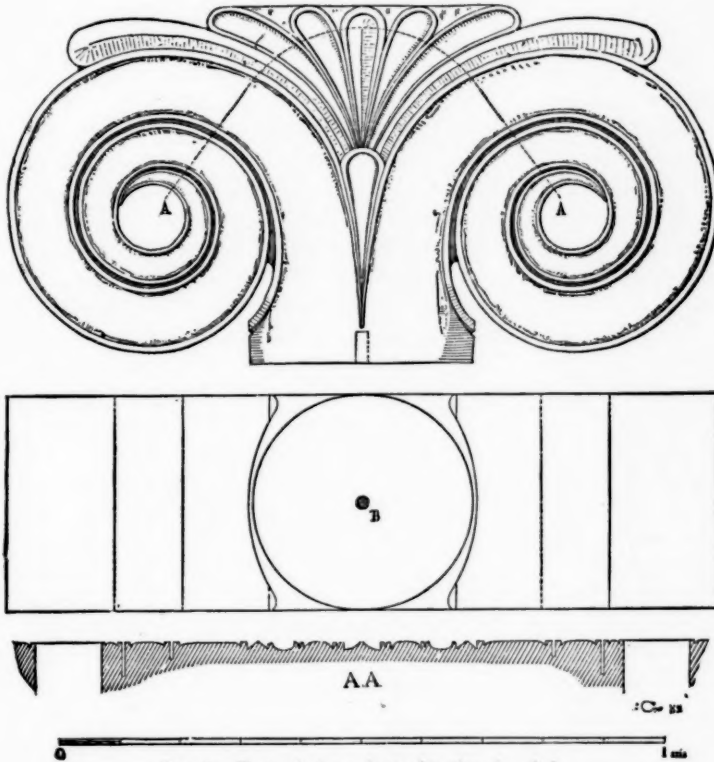


FIG. 2.—Restored view: plan and section of capital.

thus evident, that this capital is by no means a first experiment in the application of spiral forms to the upper member of a column, but is rather to be considered as a link in the long chain of architectural development which gradually led to the perfect forms of the capitals of the Erechtheion.

The helix is exact, and seems to have been determined by unwinding a cord, to the free end of which was attached a chisel-point, from a cylinder about 0.03m. in diameter, or perhaps,—for so great a refinement is not inconsistent with the character of the design,—from a slightly diminished cone as the evolute, fixed in the centre of the perforation. The bordering fillets of the spiral vary in width from 17mm. to 3mm., and are perfectly accurate to their very termination. The intelligent skill of the designer is especially to be seen in the manner in which the leaves of the anthemion have been profiled: their plane-angular, fluted, reeded, and concave-angular sections securing a play of light and shade such as no geometrical drawing can indicate (section AA, *fig. 2*). The incisions which separate the surfaces of the volutes are deepened as they retreat from the centre, gradually increasing from a shallow notch to a cut not less than 0.11m. deep. The spiral line thus varies in appearance from a light grey to a perfectly black shadow. The circular perforation in the centre of the volute,—the *ὀφθαλμός* of the Erechtheion inscription,<sup>2</sup>—measures 0.125m. in diameter. It probably served for the insertion of disks of some brilliant material, such as colored marble, glass, or metal. This method of decoration had been common in the Oriental prototypes from which the most characteristic features of the Ionic style were derived, and, though seldom adopted by the Greeks of a later period, was still employed in the volutes of the fully-developed Ionic capital,<sup>3</sup> as well as in the eyes of the parotides and guilloche mouldings. The hole is cut completely through the stone, for what purpose is not clear.

The capital, at its point of juncture with the shaft beneath, is not exactly circular in plan; the diameter from side to side being 0.01m. greater than from front to back. The summit of the shaft must consequently have been slightly elliptical. This irregularity of the stone-cutting is very remarkable in view of the perfection of the spirals and mouldings; and, as the excess is in the axis of the epistyle, it may have resulted from the capital, or more probably the shaft, having been cut from a block not sufficiently thick to allow one of the dimensions to equal the diameter determined by the

<sup>2</sup> II. 42. Hence termed *oculus* by Vitruvius (III. 5, 6), whose technical terms are, for the greater part, translated from the Greek.

<sup>3</sup> As for instance in the Erechtheion, in the great temple of Ephesos, in that of Sardis, etc.



designer. The capital was attached to the drum adjoining it by a cylindrical dowel, the hole for which (B, in plan *fig. 2*), 0.02m. in diameter and 0.055m. deep, is bored with great nicety. This pin must have served as an axis for the grinding of the capital upon the subjacent stone, during the last rubbing down of the bed surfaces. The top of the capital, which is tooled to a perfect plane, shows no traces of dowels or clamps. The reverse of the stone is, in all the main features of the design, the same as the front, but the details are somewhat less elaborate and the execution less careful. The scroll of the back is slightly rounded in profile, but has no bordering fillets, while the anthemion leaves are of simpler section, and without rims.

It is a question of much importance whether the shaft, to which the capital belonged, was placed close to a wall as a stele, or was employed as a constructive support in a building. The small diameter of the column, and, especially, the fact that one side of the capital was evidently not exposed to close inspection, seemed at first to favor the former view. After careful examination, however, the writer became convinced that the capital surmounted a tall column, probably standing *in antis* and supporting a wooden epistyle.

Notwithstanding the great projection of the volutes,—the width of which far exceeds that customary in the steles of Greece,—the bearing of the imposed weight is limited to the middle leaves of the anthemion. If the block had been the capital of a stele, intended, for instance, as a stand for inscribed stones or votive offerings, advantage would naturally have been taken of the console-like projection of the scrolls by a bearing upon the outermost leaves. This restriction of the abacus to a surface less than half as broad as the capital itself must have been determined by the consideration that, otherwise, the slightest sagging of the epistyle-beam would have crushed the sides of the volutes. From the extreme care taken to disengage the outermost leaves of the anthemion from contact with the lintel, it is evident that this precaution was held in mind.

The great projection of the volutes, as well as their shape, was derived from traditional models. The form, originally determined by the exigencies of a timbered construction, was here retained as a mere decoration, filling out the corners between the vertical support and the horizontal lintel. Thus, all the leaves of the anthemion and the backs of the volutes approach very nearly to the soffit of the epistyle, which, in the most closely related prototype (*fig. 7*), they

had actually adjoined. That the precaution was taken to restrict the weight of the entablature to a part of the capital but little larger than the upper diameter of the shaft, proves it to have formed part of a constructive framework. The lack of dowellings between this support and the imposed mass is, so far as it goes, in favor of the same conclusion. The stones of Greek steles, because of their liability to be displaced by lateral pressure, were commonly joined together by metallic fastenings cast in lead; but, for evident reasons, the abacus of a true column is not often thus connected with the lintel above it.

The most conclusive argument, however, is to be derived from the size of the block. A calculation based upon the proportions of monuments of the fully-developed Ionic style leads to the assumption, that the shaft and base belonging to the capital would, together with it, reach a height of between four and four and a half metres. Even this is considerably more than the height of the columns of many prostyle temples; and a building with columns *in antis* must necessarily be assumed to have been of modest dimensions, especially in the Troad.<sup>4</sup> But it is probable that the actual size of the shaft was greater than we should be led to expect from such a comparison. The columns of primitive Greek architecture were, in general, more diminished than those of the perfected styles; the ratio of the upper diameter to the lower, and to the height of the shaft, would consequently have been smaller than that assumed. The fact that the back of the capital is not treated with the same elaboration and care as the front is explained by the assumption that it was situated at some height, in a dark and narrow pronaos *in antis*, so that a good view of the inner side could not be obtained.

All these points,—the excessive projection of the volutes, resembling the original wooden prototype of the console-capital, the precautions taken to prevent the edges from being injured by a sagging of the epistyle-beam, the fragile nature of the stone, and the small diameter of the shaft,—lend weight to the supposition that the entablature was formed, not of blocks of stone, but of timbers and joists, such as those imitated in the fascias and dentils of the later Ionic style.

The width of the capital is exactly twice its height, the volutes being drawn in squares the sides of which are, as nearly as could be

<sup>4</sup> The Heroön of Assos, a Doric prostylos, has columns 3.6m. high.

measured without instruments of precision, 0.594m. long (1 ft. 11½ ins.). This dimension may with much probability be supposed to equal two feet of the measure used by the designer, the result being a unit of 0.297m. ( $\frac{2}{3}$  of an inch less than one English foot). The thickness of the block is 0.357m., three-fifths of its height, or three-tenths of the assumed unit. The question of the metrological importance of these dimensions, and the decimal division of the foot employed throughout the Troad in the earliest historical ages, should not be entered upon until the stone has been measured with metrological exactness.

The exceptional interest of our capital lies in its historical significance. It is one of the few memorials of the earliest period of architectural development among the Greeks that have not been swept away in the construction of the noble buildings erected soon after the Persian wars, or of the showy edifices of the Diadochi. The history of Neandreia will explain the circumstances which secured the preservation of those remains not easily removed from the site during ancient times. The capital cannot be ascribed to a later date than the sixth century B. C. It is one of the many experiments made by the Greeks of Asia Minor to determine the forms which, according to the tradition preserved by Pliny<sup>5</sup> and Vitruvius (iv. 1, 7), were first employed in connection with a peripteral plan in the primitive temple of Ephesos.

The testimony of antiquity is unanimous in the assertion, that the Ionic style, as its name signifies, was derived by the European Greeks from the eastern coast of the Aegean.<sup>6</sup> Discoveries of the present age have, further, made it evident, that the most characteristic features of this style passed through the earliest stages of development, neither in Greece nor in Asia Minor, but in Mesopotamia.

Before the application of the historic method to the study of the derivation of architectural forms, the determination of the influences which led to the adoption of the Ionic details was nothing but hope-

<sup>5</sup> Pliny's words (xxxvi. 56), in *Ephesia Dianae aede primum columnis spirae subditae et capitula addita*, can only be referred to capitals, as well as to bases, of the Ionic style.

<sup>6</sup> Nothing can be more at fault than Boetticher's statement (*Tektonik der Hellenen*. Berlin, 1874, second edition, vol. i. p. 165) that the Ionic style originated in Attica. The entire position of this remarkable work in regard to questions of architectural history is a warning against the misleading influence of æsthetic theories.

less conjecture. It is not long since, that scholars literally believed, or at all events seriously considered, the explanation of the origin of the style given by Vitruvius (iv. 1, 7), who relates that the Ionic column imitated the proportions of a woman,—the volutes of the capital representing the curled locks of hair; the flutes and fillets of the shaft, the folds of the wide draperies; and the base, the sandals. Thiersch,<sup>7</sup> who occupied a position of the highest eminence among classical scholars during the first half of the present century, gave this picture a touch of reality by his identification of the Ionic woman as a priestess with curled tainias tied about her ears. Whatever may be the truth of the Vitruvian simile, as characterizing the lightness and grace of the Ionic in comparison with the virile proportions of the Doric, modern writers, in following the example of the Roman *maestro muratore*, have not restricted their comparisons to such pretty themes.

Winckelmann<sup>8</sup> suggested that coiled snakes may have served as models for the volutes. Stackelberg<sup>9</sup> argued that the twisted horns of rams, suspended on the walls of primitive sanctuaries, or on the corners of altars, were imitated by the original designer of the Ionic capital. This idea was elaborated by Raoul-Rochette,<sup>10</sup> and particularly by Carelli,<sup>11</sup> passing into the text-books through K. O. Mueller.<sup>12</sup> Wolff<sup>13</sup> believed that the bark of trees, placed upon the top of the Doric echinos "before it had an abacus," by curling round the block had provided the starting point for the helix; while Hahn<sup>14</sup> took the spirals of marine shells as his model. Among the advocates of such absurd prototypes we may note no less an authority than

<sup>7</sup>F. W. Thiersch, *Ueber die Epochen der bildenden Kunst unter den Griechen*. (Second edition) Halberstadt, 1829.

<sup>8</sup>J. J. Winckelmann, *Versuch einer Allegorie, besonders fuer die Kunst*. Dresden, 1766.

<sup>9</sup>O. M. von Stackelberg, *Der Apollotempel zu Bassae*. Frankfurt am Main, 1826.

<sup>10</sup>D. Raoul-Rochette, *Monuments inédits d'Antiquité*. Paris, 1834.

<sup>11</sup>F. Carellius, *Disertazione esegetica intorno all'origine ed al sistema della sacra architettura presso i Greci*. Napoli, 1831.

<sup>12</sup>K. O. Mueller, *Handbuch der Archaeologie der Kunst*. (Third edition) Stuttgart, 1878, 54, 3.

<sup>13</sup>J. H. Wolff, *Aesthetik der Baukunst*. Leipzig, 1834. This explanation has been reiterated, during the past year, by H. Jennings, *Phallicism, celestial and terrestrial, heathen and Christian*. London, 1884.

<sup>14</sup>G. von Hahn, *Motive der Ionischen Saeule*. Wien, 1862.

Viollet-le-Duc,<sup>15</sup> who conceived the Ionic volute to have been copied from curled shavings left by the primitive carpenters upon the sides of their wooden posts, illustrating this tasteless theory by a cut that shows forms which wood could not assume under any treatment. Even less satisfactory are those conceptions of an idealized spring, taking the shape of an elastic cushion, which, placed upon the Doric capital in the direction of the epistyle, is supposed to have been squeezed out by the superimposed weight of the entablature so as to curl again around the edges of the echinos. Chief among the professors of this view is Guhl.<sup>16</sup> This list might be greatly extended. Mariai<sup>17</sup> gives the names of no less than twenty-six writers upon the Ionic capital previous to the publication of his own work in 1825. Some of the early treatises, such as those of Selva<sup>18</sup> and De Rossi,<sup>19</sup> display an ingenuity and a learning worthy of a better cause.

All these labored explanations of the significance and derivation of the Ionic capital have fallen to the ground,—all this misdirected antiquarianism has become a fit subject for ridicule,—upon the recognition of the fact that a capital of anthemions and volutes, essentially of the same character as that of the Ionic style, was customary in Mesopotamia for centuries previous to the development of Greek architecture, and is to be traced through Kappadokia, Phrygia, and Phenicia, to the coast of Asia Minor occupied by the Hellenes. A great variety of terminal ornaments were formed by the designers of Assyria in imitation of the radial leaves of the palmetto. The ends of quivers, the plumes of horses' trappings, and other unweighted tips, appear of precisely the same shape as the conventional representations of palm-trees upon Mesopotamian reliefs. When these palmettos were so bound together as to form the so-called Tree of Life, or such branches of flowers as are held by certain deities, the ends of the connecting ribbons or the bracts were curled at the base, taking the place of the bunches of dates seen under the palm-trees of the reliefs. In architectural details this form was adopted, almost without change, for the apex of steles. Among the ruins of the palace

<sup>15</sup> E. E. Viollet-le-Duc, *Entretiens sur l'architecture*. Paris, 1858-72. Fig. 6.

<sup>16</sup> E. Guhl, *Versuch ueber das Ionische Kapital*. Berlin, 1845.

<sup>17</sup> L. Marini, *Sul ritrovamento da me fatto dell' metodo di descrivere la voluta Ionica Vitruviana*, in the *Atti dell' Accademia Romana di Archeologia*. Roma, 1825, vol. II.

<sup>18</sup> G. Selva, *Dissertazione sulla voluta Ionica*. Padova, 1814.

<sup>19</sup> G. de Rossi, *Esercitazione sulla voluta del capitello Ionico*. Firenze, 1817.

of Khorsabad<sup>20</sup> a square post has been preserved, in all respects like the anthemion steles of Greece, the terminating palmetto being the same as that continually occurring upon Greek vases<sup>21</sup> and the antefixes of early Greek temples.

It is with the higher development of these forms, through their connection with the functional capital, that we are at present concerned. By the adoption of the palmetto as an ornament intermediate between a support and an imposed weight, the spread of the leaves was necessarily much restricted. An increased importance was thus assigned to the projections adjoining the shaft. It was natural that this should have been made in the shape of a volute. The spiral was, in every way, the form most pleasing to the early Mesopotamian decorators. Not only did the ends of bows, the hilts of swords, the carved ornaments of furniture, and the embroidered

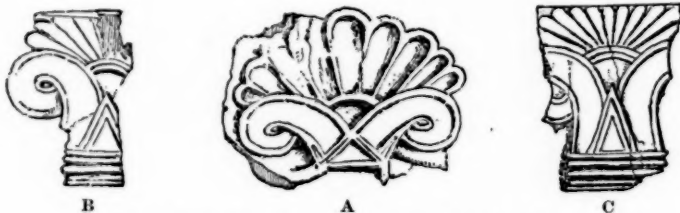


FIG. 3.—Ivory-carvings from the north-western palace of Nimroud.

trimmings of robes assume this shape, but the spiral served in the pictorial art of Assyria to represent objects really of entirely different outline, such as entwined stems and leaves of plants, curls of the human hair and beard, and even ripples of water. In short, the spiral was as universal in the designs of Mesopotamia as were the triangle and the zig-zag in those of Egypt.

Out of the ornamental spirals and palmettos of Assyria were gradually developed the volutes and the anthemion of the Ionic style. Semper,—most suggestive of writers upon the architectural forms of the ancients,—displayed the extraordinary intuition for

<sup>20</sup> V. Place, *Ninive et l'Assyrie*. Paris, 1867-70, vol. III. pl. 34.

<sup>21</sup> One among many: Attic lekythos, with a representation of Orestes at the tomb of Agamemnon, from the collection of Count Pourtales-Gorgier, published by Raoul-Rochette in his *Monuments inédits d'Antiquité*, pl. XXXI. A.; and also by A. Maisonneuve, in his *Introduction à l'étude des vases antiques*. Paris, 1817, pl. xxx.



which he is remarkable, when he declared the evolution of the Ionic capital to exhibit a *stufenweise Umbildung des zuerst nur eine leichte Palmette tragenden Volutenkelches in den balkenbelasteten Säulenknäuf.*<sup>22</sup> The capabilities of this combination for conventionalized development led to its frequent employment in the details of various architectural decorations. Several ivory-carvings from pieces of furniture, found in the north-western palace of Nimroud and now in the British Museum, clearly show the Assyrian form of this capital<sup>23</sup> (fig. 3). That marked A is not, strictly speaking, an architectural detail. A lateral connection, visible beneath one of the volutes, shows it to have formed part of such ornamental foliage as that before referred to. The palmetto is consequently predominant and of a semi-circular outline. B and C, on the other hand, show the form as adapted to a functional capital. The leaves have decreased in size and elaboration; they have become a simple anthemion, and are terminated by the straight line of an epistyle. The volutes occupy three quarters of the height; they are of more independent formation and better proportion. The horizontal lines at the base are multiplied and emphasized, forming a division between the capital and the shaft similar to the annulets of the floral columns of Egypt. The absolute similarity between these two examples proves that the shape was a definitely determined type of decoration. There is every reason to believe that these ivories are exact representations of a capital systematically employed in Assyrian architecture. They are essentially the same as the early Greek capital of Mount Chigri, from which they differ only in the imperfect spiral

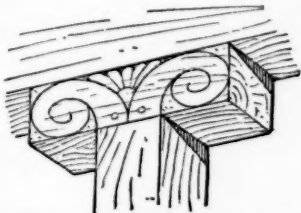


FIG. 4.—Supposed decoration of the original wooden capital.

<sup>22</sup> G. Semper, *Der Stil in den technischen und tektonischen Künsten*. (Second edition) München, 1878. Compare, also, J. Braun (*Geschichte der Kunst*, Wiesbaden, 1856–58), “*Der Ionische Stil gehört Niniveh, vielleicht bereits Babylon an; denn er ist der gemeinsame Stil Asiens schon in unberechenbar alter Zeit—er ist ein mächtiger Stil, dessen Sendboten wir durch ganz Kleinasien und ueber die phoenikische Kueste nach Karthago und ins innerste Afrika verfolgen koennen.*”

<sup>23</sup> That marked A is shown in a small and inexact vignette serving as the tail-piece to the list of illustrations in Layard, *Discoveries in Nineveh and Babylon*. London, 1853. The others have not hitherto been published.

of the volute, and in the triangle masking the convergent lines at the base.

Owing to the nature of the building-materials of Assyria, the columns of that country were of wood,<sup>24</sup> and but few vestiges of them have been preserved. Fragments of wooden shafts, encased in scales of bronze, have, however, been found,<sup>25</sup> and these suffice to give certainty to the conclusions derived from the representations of columns upon Mesopotamian reliefs.

No doubt can exist as to the origin of the spiral capital from the application of the above-described forms to the details of such wooden supports. As is the practice in every rational construction of timber, a horizontal block, projecting in the direction of

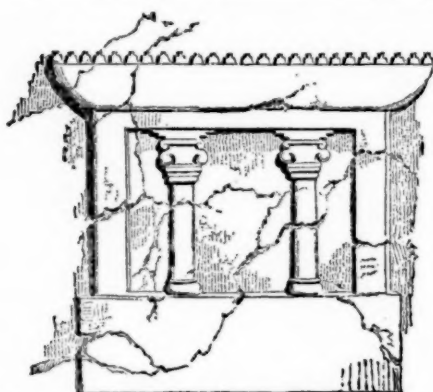


FIG. 5.—Assyrian aedicula from a relief. Khorsabad.

the imposed beam, was placed between the support and the epistyle (fig. 4). This intermediate member lent itself readily to a decoration of anthemion leaves and lateral volutes. Spirals were drawn upon the projecting sides, either in color or in incised lines. Wooden columns with capitals of this kind, similar in design to the ivory-carvings before described, seem

to have been universal in Assyria, and to have formed, so to speak, the only columnar order of the architecture of that country. They appear in the well-known representations of aediculas, like that

<sup>24</sup> Layard's workmen kindled their watch-fires with the timbers employed nearly three thousand years ago in the construction of the palaces of the Assyrian kings. Strabo (739), in an interesting passage relating to the buildings of Babylon, remarks that both beams and columns were made of the trunks of palm-trees, the latter, in the dwellings of the poorer classes, being wound around with twisted wisps of straw, coated with stucco and painted. A more monumental method of this revetment, referred to in Note 25, imitated the scales of the palm-tree in sheets of bronze.

<sup>25</sup> A cylindrical column of cedar wood was found and published by Place, *Ninive*, vol. I. p. 120, and vol. III. pl. 73.



standing in a royal park, upon a relief from the northern palace of Koyundjik,<sup>26</sup> and that on the bank of a river, from Khorsabad <sup>27</sup> (*fig. 5*). The fact, that the spirals are, in these instances, so doubled that four volutes appear between the shaft and the epistyle, does not affect the fundamental character of the capital, this duplication being due to the adoption of two transverse blocks of wood, instead of one.

Even more exact information concerning the appearance of the Mesopotamian capital is to be obtained from the Sippara stone, dating from about 900 B. C., now in the British Museum. Upon it is shown one side of a tabernacle under which a deity sits enthroned, and it is believed by Assyriologists that the artist has here imitated details of the chief sanctuary of Sippara. The column is represented with the greatest care. The slender shaft, evidently of wood, appears to be covered, in imitation of the bark of a palm-tree, with scales like those discovered by Place, and the capital is of a spiral form, very similar to the ivory-carvings (*fig. 6*). The volutes spring from the shaft, from which they are separated by three annulets. They bear a bud of semi-circular outline, of the same general form as the anthemion, and precisely like that of a Phœnician capital found in Kypros (*fig. 7*), this abbreviation of the palmetto having been rendered necessary by the cramped space between the scrolls, which did not allow an indication of the separate leaves. The appearance of these details upon the base, as well as upon the capital, of the Sippara column is the clearest possible evidence of the timbered construction: the intermediate block of carved wood being as much needed between the base of the post and the sill, as between its summit and the epistyle beam. The adoption of forms originally thus determined does not, of course, disprove the assumption of Perrot,<sup>28</sup> that the capital of



FIG. 6.—Upper part of a Babylonian column from the Sippara stone.

<sup>26</sup> A. H. Layard, *Nineveh and its Remains*. London, 1849, vol. II. Published also in G. Rawlinson, *The Five Great Monarchies of the Ancient Eastern World*. (Second edition) London, 1871, vol. I.; and in many other text-books.

<sup>27</sup> Botta et Flandin, *Monuments de Ninive*. Paris, 1849–50, pl. 114. The illustration is taken from this work.

<sup>28</sup> Perrot et Chipiez, *Histoire de l'Art dans l'Antiquité*. Vol. II. *Assyrie*. Paris, 1883. The author, however, certainly goes too far when, in the subsequent volume of the

Sippara was itself executed in sheet bronze, either soldered or beaten to shape. The prototype,—the member to which the helix and anthemion were first applied as a decoration,—was certainly of wood.

The forms of the baluster, from its first appearance until the present day,—during well-nigh three thousand years,—have never overcome the one-sidedness resulting from this original timbered construction. Contrary to the Doric and Corinthian capitals of the ancients, to the trapeze-shaped capital of the Byzantines, and to the cube capital of the Romanic style, the Ionic volutes, like the consoles of such Indian piers as those of the grotto of Ajanta, are chiefly developed in the direction of the epistyle. When we, today, employ the spiral capital,—whether placing the volutes vertically, like those of Pompeii, or horizontally, according to Vignola's textbook of the Renaissance,—we make use of forms which can be traced back to the details of Mesopotamian ornament: in the same way that so many of the words which we utter are derived, through many transformations, from the primitive speech of our Indo-European ancestors.

Long before the Greeks had built in the Ionic style,—while the stone walls of the primitive fanes of Hellas still supported the beams imitated in the Doric entablature,—the races inhabiting the plateaus of Kappadokia, Lykaonia, and Phrygia, in Asia Minor, had derived the chief features of their architecture from Mesopotamia. The spiral capital of Assyria appears in Kappadokia in a city probably destroyed as early as the time of Kroisos;<sup>29</sup> the Assyrian palmetto has recently been found as the termination of a column in the great necropolis of ancient Phrygia;<sup>30</sup> and the celebrated tombs of Lykia, especially those of Antiphellos, Myra, and Telmessos, exhibit, together with

history, he assumes that the form of the volutes was suggested by a sphyrrelaton model.

<sup>29</sup> Identified with Pterion in G. Perrot, *Exploration archéologique de la Galatie et de la Bithynie, d'une partie de la Mysie, de la Cappadoce et du Pont; exécutée en 1861*. Paris, 1862-72. Compare a general view of the Ionic style given by the same author in an essay on *l'Art de l'Asie Mineure, ses origines, son influence*, reprinted from vol. xxv. of the *Revue Archéologique* in his *Mémoires d'Archéologie, d'Épigraphie et d'Histoire* (Paris, 1875); and in his short note *Sur l'origine de l'Ordre ionique*, in the *Bulletin de la Société Nationale des Antiquaires de France*, année 1871.

<sup>30</sup> W. M. Ramsay, *Some Phrygian Monuments*. Reprinted from the *Journal of Hellenic studies*, 1882, pl. xix.

late and debased forms, such primitive features as to place it beyond doubt that this province was an important station in the advance of the Ionic style from Mesopotamia to the Aegean. The most striking examples of the intermediate stages of development, however, are the Phœnician works brought to light in Syria, Malta, and especially in Kypros. All the varieties of the Assyrian volute are recognizable among these remains. A capital discovered at Trapeza, near Famagusta, Kypros, now in the Louvre,<sup>31</sup> (*fig. 7*), is of precisely the same type as that represented by the ivories of Nimroud, and the capital of Chigri. The clearest possible understanding of the development of the Ionic volutes is gained by a comparison of this work with the conventional decorations of Mesopotamia on the one hand, and the

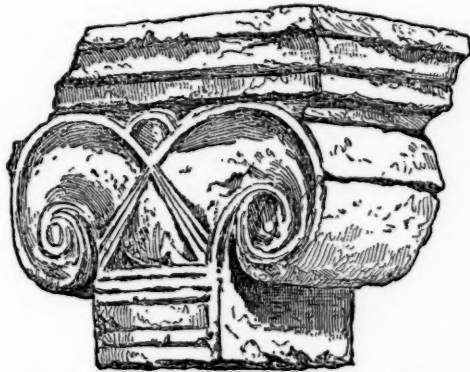


FIG. 7.—Phœnician capital found at Trapeza, Kypros.

primitive Greek capital on the other, between which it forms a connecting link. The designers of Phœnicia, in adopting the forms of Assyrian art, served rather to perpetuate than to perfect. In architectural history the importance of this commercial people consists in their having spread abroad methods of artistic expression derived by them from older civilizations, rather than in any great progress of their own. The capital of Trapeza is an improvement upon the Assyrian model, in that the volutes occupy the entire height between

<sup>31</sup> Perrot et Chipiez, *Histoire de l'Art dans l'Antiquité*. Vol. III. *Phénicie-Chypre*. Paris, 1885. The illustration is taken from this work. The height of this capital is 0.75, the thickness 0.30, the length of the abacus 1.22m.

the abacus and the annulets, and approach more closely to the true curve of the helix. But in other respects the changes are few and by no means advantageous. The square plan of the original wooden post has been retained, together with the broad annulets and the triangle of hard lines, which are connected with the base of the volutes in a most inorganic fashion. The high abacus of long and narrow plan, borrowed from the capitals of another style, restricts the development of the spiral projections and cramps the anthemion to a mere knop, of still less importance than that of the Sippara capital.

Even before the discovery of the capital from Mount Chigri, the representations of Ionic details upon the most ancient Greek vases made it evident that the primitive form of this member must have had a much greater projection than that customary in the perfected examples, and that the volutes did not lie upon an echinos moulding, but grew directly from the shaft, bearing between them an anthemion.



FIG. 8.—Ionic capital from an archaic vase.

An archaic amphora from Volcei, now in the British Museum,<sup>32</sup> clearly shows this formation (*fig. 8*). The painted and incised outline upon this vase might be a direct imitation of such a capital as that now brought to light, with which it agrees even in proportions. Another archaic vase of the same collection (No. 480) shows a

very similar capital. The architectural details of such paintings were

<sup>32</sup> The painting on this vase is published by E. Gerhard (*Auserlesene griechische Vasenbilder*. Berlin, 1839-58, vol. iv. taf. CCXLI) but without sufficient accuracy for architectural comparison. Capitals of the kind are by no means uncommon: compare F. Inghirami, *Pitture di Vasi*. Firenze, 1852-56. Vol. III. Tav. 384.

In rare instances volute capitals of primitive form were executed in relief. One of the most remarkable examples is the detail of terra-cotta,—possibly the handle of a large vase,—found during the excavations at Assos. Its upright scrolls and clumsy abacus are touched with white, the rest of the red clay being covered with a dull-red surface-priming. This fragment is now in the collection of antiquities from Assos, in the Boston Museum of Fine Arts, and is numbered P. 4121.

It is probable, also, that the heraldic sphinxes of Assos, upon the epistyle of the chief temple of that place, rest their paws upon a diminutive Ionic stele, in the same manner as the lions of the gate of Mykenai face an inverted proto-Doric column. The surface of the stone has been so obliterated by weathering that the spirals cannot be traced upon either of the reliefs; still, it is plain, from that in Boston numbered S. 1158, and especially from that shown by pl. 19 of the Assos Report, that the sculptor has here represented the outline of the volutes, and even of the middle anthemion, of an archaic Ionic capital.

declared by Hittorff to be *les seuls souvenirs qui nous restent d'édifices sacrés sur lesquels les notions historiques ont entièrement disparu*.<sup>33</sup>

The discovery here published supplies the actual archaic example hitherto wanting.

The Chigri capital shows a great improvement, even upon those works most closely related to it which have been found in the interior of Asia Minor and in Kypros. Hellenic genius, brought to bear upon this architectural member, at once manifests its superiority in technical respects. The deformed volutes of the Kypriote capital have become perfect spirals, while the anthemion leaves, as before explained, are of great subtlety of design. The disturbing triangle at the base of the volutes has been omitted; and the annulets, if still employed, are transferred to the shaft. A decided progress is noticeable in the omission of the Phœnician abacus, and the restriction of the epistyle-bearing to a small part of the capital. In this point the style has here already attained to its final perfection.

In other regards, it is still far removed from the most primitive Ionic capitals of Greece hitherto known. The excessive projection, considerably greater upon either side than the diameter of the shaft, betrays the close dependence of the capital upon the forms of a wooden construction. In striking contrast to the square termination of the Doric column, the plan of this member is so oblong that the front is more than three times as long as the side. A lateral projection so disproportionate, not only could never have originated in the stone terminations of a round shaft, but it would be difficult to believe from the drawing (*plan, fig. 2*) that the capital was executed in that material.

So one-sided a capital could only have been employed *in antis*. With the subsequent introduction of the peripteral plan it became necessary to render the proportions of front and side more nearly equal, in order to adapt the volutes to the corner column,—which always presented the chief difficulty of this style.<sup>34</sup> The important

<sup>33</sup> Hittorff et Zanth. *Architecture antique de la Sicile*. (Second publication) Paris, 1870.

<sup>34</sup> The assertion of Lohde (*die Architektonik der Hellenen*, Berlin, 1862; reprinted in J. M. von Mauch, *Die architektonischen Ordnungen der Griechen und Römer*. Seventh edition, Berlin, 1875), that the forms of the Ionic style originated in connection with the peripteral and dipteral (!) plan is utterly incorrect, and would be beneath criticism, were it not that it is made in a popular text-book.

combination peculiar to the perfected Ionic capital, the conjunction of an echinos with the volutes, was one of the means chosen to effect this end. The front of the capital from Chigri is as entirely without projection, as is that of the hypothetical wooden support given in figure 4 to illustrate the first application of the helix to the termination of a column. In the Erechtheion, however, the length of the capital in proportion to its depth is found, when compared with that of Chigri, to have been reduced by very nearly one half, the ratio of the baluster to the front of the volutes being about 4 to 7.

The impossibility of allowing the epistyle to rest upon any part of such volutes as those of the Chigri capital, and the desire to emphasize the horizontal lines of the termination, led to a further change of much significance, namely, the inversion of the scroll in such a manner that the two spirals no longer proceeded from the shaft, but were connected by a horizontal band, upon the back of which rested the narrow abacus and the epistyle-beam. This arrangement is unquestionably of great antiquity, appearing upon the before-mentioned relief of Kappadokia and in archaic vase-paintings from Kypros. It was destined to wholly supersede the upright volutes. But, as in the Doric style some primitive features were retained in the antae-capitals, so, even in the latest periods of Greek architecture, the principle of the vertical volutes continued to be employed in the capitals of pilasters, as for example in those of the great temple of Miletos, and of that of Athena Polias at Priene. With this change in the position of the volutes the anthemion ceased to be a constituent member of the Ionic capital; yet so entirely had it been identified with the style, that it remained persistently in use as a subordinate decoration: appearing not only in antefixes, simas, and decorated bands, but in the inner corners of the spirals, and in the Attic necking of the capital itself. In the archaistic capital of the temple of Bassae, the anthemion even assumes its original position between the two volutes in the middle of the face.

There is but a single example known to illustrate the stages of development intervening between the capital from Chigri and those of the peripteral Ionic temples, namely, the fragmentary capital from the Heroön of Selinous, probably referable to the sixth century B. C. (*fig. 9*). Unfortunately, so little remains of this, that it is not even certain whether the volutes were vertical or horizontal; probabilities favor the assumption of the latter arrangement, but in this respect



no great weight can be attached to the restoration given by Hittorff.<sup>35</sup> The helix, though it has more numerous turns, is very similar in general character to that of the Chigri capital. The relative thickness of the member is, however, much greater, and it is especially remarkable that the roll, although not contracted as in all later balusters, has been decorated with a pattern of scales. Apart from the too numerous convolutions of the spiral, the most immature feature of the design is the excessive projection of the abacus, the edge of which is ornamented with an egg-and-dart moulding. From this it appears that the change in the position of the volutes led, at first, to an extension of the bearing. This was again reduced in

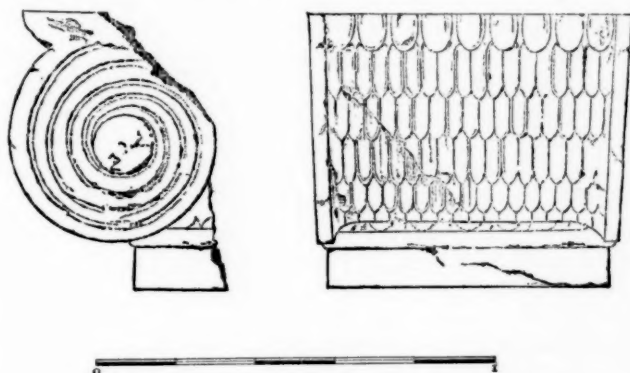


FIG. 9.—Fragment of an archaic Ionic capital from Selinous.

subsequent times, the front of the strip receiving the same carved ornaments as the side.

It is worthy of note, as an evidence of the tentative methods of this period of advance, that the Ionic capital was, as in the Heroön of Selinous, often employed together with the Doric entablature of triglyphs and metopes: the capital developed upon the tall palm-shafts of Asia thus being combined with the entablature derived from the wall-plates and beams of primitive Hellas. It is not strange that, among the few remains of this earliest period, but one

<sup>35</sup> J. I. Hittorff, *Restitution du temple d'Empédocte à Selinonte* (Paris, 1851, pl. vi.), and the work before quoted on the ancient architecture of Sicily. The illustration is taken from the latter publication.

monument of so imperfect an arrangement should have been preserved until the present day. But the number of examples furnished by the paintings of archaic Greek vases<sup>36</sup> may be taken as an indication that the forms of the volute-capital had come into general use at a period when the Ionic zophoros and dentils had not been introduced into Greek architecture, or, at least, had not been developed into a system.

The same elements that formed the capitals of the Erechtheion constituted the terminations of the weak and overlaid shafts of Persepolis; the spirals and palmettos of semi-barbarous Mesopotamian decorations were employed as architectural details by the designers of Persia, as well as by those of Attica. Yet the decadence evident in the architecture of Persia is contemporary with the highest development of the Ionic style among the Greeks. No better illustration is possible of the truth, that growth, and not involution, is the principle of all progress in ancient art.

The builders of the present age have to deal with a confusion of decorative forms and constructive methods similar to that which prevailed throughout the ancient world before the rise of Greek architecture. Hence, the most direct and practical service of archæology to architecture must consist in a historical elucidation of those principles of artistic selection and evolution which were followed by the Greeks in their progress toward the incomparable perfection of Attic monuments.

JOSEPH THACHER CLARKE.

[Conclusion in next number.]

<sup>36</sup>As, for instance, the archaic vase in the British Museum, No. 480, and that published by Inghirami, before referred to. Many others have been collected by Hittorff. It may be assumed, with great probability, that the combination of the triglyph-frieze with the Ionic capital, observable in such later structures as the tomb of Theron at Akragas, the Tomb of Absalom near Jerusalem, and several rock-cut façades in the great necropolis of Kyrene, is due to a reminiscence of the primitive employment of these features upon the same building. It will be observed that these monuments of Sicily, Syria, and Northern Africa are, although late, decidedly provincial, and hence might naturally be expected to preserve barbarous and immature traits which had wholly disappeared from the art of Greece itself.



## NOTES AND INSCRIPTIONS FROM ASIA MINOR.

### VII.—HADRIANOPOLIS—STRATONIKEIA.

Stratonikeia, a city on the borderland between Lydia and Mysia, or, to use the nomenclature of late Roman and Byzantine custom, between Lydia and Hellespontos, has, through a curious fate, almost disappeared from the knowledge of modern geographers. It was a place of some note: it struck coins, it has left some inscriptions. But it has been completely merged in the more important and famous Karian Stratonikeia: its coins have been attributed to the Karian city; the surname Hadrianopolis, with which Hadrian honored it on his first journey through Asia Minor, has been applied to the Karian city, which Hadrian in all probability never saw: and an inscription found at Kirkagatch in the valley of the Kaikos, on or near the actual site of the northern Stratonikeia, has exercised the ingenuity of its editor to explain how it travelled so far from Karia.<sup>1</sup> The inscription, Lebas and Waddington, No. 1043, is as follows:

Ἡ βουλὴ καὶ ὁ δῆμος Ἀδριανοπολεῖτῶν Στρατονικέων Διόδωρον Νεκάνδρου Φιλομήτορα . . . . . ἐτίμησαν;<sup>2</sup> to which the following note is added: *Stratonicee en Carie avait pris le nom d'Hadrianopolis . . . . . On ne voit pas pour quel motif cette inscription a pu être placée dans un edifice public de Germé . . . . Il est possible qu'il y ait quelque erreur dans la note communiquée par Borrell.*

The correct interpretation of the inscription is, that there were two cities named Stratonikeia, one in Karia and one in Lydia. The inscription shows (1) that Stratonikeia of Lydia was at or near the modern village of Kirkagatch, (2) that this northern Stratonikeia, and not the Karian city, assumed the name Hadrianopolis, and struck coins with the legend

ΑΔΡΙΑΝΟΠΟΛΕΙΤΩΝ ΣΤΡΑΤΟΝΙΚΕΩΝ

<sup>1</sup> This is one of the very few cases in which later research has found a mistake in the admirable commentary from which I quote.

<sup>2</sup> "The Senate and the People of Hadrianopolis Stratonikeia . . . . honored Diodoros Philometor, son of Neikandros."

The *Notitiae Episcopatum* mention Stratonikeia regularly as in the province of Lydia, and the lists of bishops present at the Councils of Chalkedon (451), Ephesos (431), etc., include the bishop of the Lydian city. Le Quien alone among modern writers correctly distinguishes the two cities. Hierokles appears to omit the Lydian city, but he gives it in the province of Hellespontos. Kirkagatch is near the frontier of the two provinces, and was by Hierokles included in the northern province. The name in Hierokles is very corrupt, for the great part of his list of Hellespontos is so disfigured that the names are hardly recognizable. Some *Notitiae* mention the bishopric *Στρατονικείας ἡτοι Καλάνδου*, showing that Kalandos and Stratonikeia were neighboring towns, administered by the same bishop.<sup>3</sup> In Hierokles the two names have been corrupted to *Σζέλεντα*, i. e., *εἰς Κάλανδα*, and *Ξίος Τράδος*, i. e., *εἰς Στρατον[ίκεαν]*. Both are in Hellespontos.

Ptolemy and Strabo omit the Lydian Stratonikeia entirely, and the epitomizer of Stephanos Byzantios mixes up the cities in one confused note: *Στρατονίκηια πόλις Μαονίας πλησίον Καρίας*. There is no doubt that the epitomizer has here confused the account of two cities given in the original work, and that he would have more correctly represented the original, if he had said *Στρατονίκηια, πόλις Μαονίας· β' Καρίας πλησίον Μυλασοῦ*.

I shall not here try to show that the Lydian Stratonikeia lay on the route taken by Hadrian on his first journey through Asia Minor, and that probably he did not pass near the Karian city on either of his journeys. Even without this proof, which I shall give elsewhere, the inscription just quoted is sufficient evidence that the coins of Hadrianopolis-Stratonikeia must be classed to the Lydian city. This city also struck coins with the simple legend *Στρατονικέων*, for Mr. B. V. Head informs me that the river-god ΚΑΙΚΟΣ appears on a coin of Stratonikeia in the cabinets of the British Museum.

I may add that Germé, which M. Waddington considers to have been situated at Kirkagatch, was in all probability on the northern side of the Kaikos: the river was almost certainly the boundary between the two provinces, Lydia and Hellespontos, and Germé belonged to the northern province.

<sup>3</sup> A good example of the custom is given by Hirschfeld, *Reisebericht*, in BERL. MONATSBER. 1879, p. 315.

## VIII.—A HYRGALEAN VERB.

I found the following inscription engraved on a small marble stele in the village of Khanchallar, a mile and a half north of Demirdji Keui, which is the chief town of the Tehal Ova. This part of the Tehal Ova is, as has been proved in the *Journal of Hellenic Studies* (1883, p. 386), the *Hyrgaletici campi* of Pliny (N. H., v. 29), or according to the native fashion τὸ κοινὸν τοῦ Ὑργαλέων πεδίου.<sup>4</sup>

ΜΕΛΤΙΝΗ ΚΑΙ  
ΓΛΥΚΩΝΚΑΙΕΛΕΥΘΕΡΟΣ  
ΜΕΝΑΝΔΡΩΠΑΤΡΙΓΛΥ  
ΚΥΤΑΤΩΜΝΕΙΑΣΧΑΡΙΝ  
ΕΙΔΕΤΙΣΤΗΝΕΤΗΛΗΝ  
ΚΑΘΕΛΕΙΗΜΑΝΙΣΕΙΣΕΙ  
ΤΟΥΣΘΕΟΥΣΕΝΑΝΤΙΟΥΣ<sup>5</sup>

*Μελτίνη καὶ Γλύκων καὶ Ἐλεύθερος Μενάνδρῳ πατρὶ γλυκωτάτῳ μνησίας χάριν· εἰ δέ τις τὴν στήλην καθέλῃ ἢ μανίσει, ἔξει τοὺς θεοὺς ἐναντίους.*

The only point of interest in the inscription is the verb *μανίζω*, of which I find no other example. The adjective *μανός* is not uncommon: it is said to be Attic for *ἀσυνός*. The sense appears to be "make less, injure." The future *ἐλῶ* occurs in later Greek.

The inscription is probably not later than the first century after Christ; at a later date we should hardly find so many names purely Greek with no mixture of Roman.

I may add that one more mention of the very rare name Hyrgalea occurs in an inscription published by M. P. Paris in the *Bulletin de Correspond. Hellén.* 1884, p. 248. M. Paris reads Ὀργαλέως, and refers it to a hypothetical *petite ville riveraine de l'Orgas*, a small tributary of the Maeander close to Apameia. He should have read Ὀργαλέως, a by-form of Ὑργαλέως.

W. M. RAMSAY.

<sup>4</sup>"The Federation of the Hyrgalean Plain."

<sup>5</sup>"Meltine and Glykon and Eleutheros (erected this stele) to their sweetest father Menander in memoriam; and if any one shall destroy or injure the stele, he will have the Gods against him."

# LAW CODE OF THE KRETAN GORTYNA.<sup>1</sup>

## II.

### TEXT.

#### VI.

<sup>1</sup> *Ας x' ὁ πατήρ θώη, τῶν τῶ π-*

- ατρός χρημάτων πὰρ υἱός | μὴ ὠνῆθαι μὴδὲ καταθιθ-  
 5 εθθαι· ἄτι δέ x' αὐτὸς πάσηται ἢ ἀπολάχῃ, ἀποδοῖθῃ,  
 αἷ κα λῆ. μὴδὲ τὸν πατέρα τὰ τῶν τέκνων, αἷ x' αὐτοὶ πάσων-  
 10 ται ἢ ἀπολάχωνται, μὴδὲ τὰ τῶν γυναικὸς τὸν ἄνδρα ἀπο-  
 δοῖθαι μὴδ' ἐπισπένσαι μὴδ' | υἱὸν τὰ τῶν ματρός. αἷ δ-  
 ἐ τις πρίαιτο ἢ κατὰθειτο ἢ ἐπισπένσαιτο ἄλλῃ δ' ἔγρατ-  
 15 τα]· ἢ τὰδε τὰ γράμματα ἐγ[ρατται, τὰ] μ[ε]ν  
 χορήματα ἐπὶ τῇ ματρὶ ἤμ[εν] x' ἐπὶ τῇ γυναικί, ὁ δ' ἀπο-  
 20 δοῖμενος ἢ καταθέντος ἢ ἐπισπένσαντος τῷ πριαμένῳ  
 ἢ καταθεμένῳ ἢ ἐπισπεν[σα]μένῳ διπλῇ καταστα-  
 σι καὶ τί x' ἄλλ' ἀτάσῃ τὸ ἀπλόον· τῶν δὲ προῖθαι μὴ ἐν-  
 25 δεκὸν ἤμ[εν]. αἷ δέ x' ὁ ἀντίμολος ἀπομολῇ ἀνφὶ τὸ χρ-  
 εός φ' x' ἀνφισιμολίωσι, μ[ὴ] ἤμ[εν] τῶν ματ[ρ]ός ἢ τῶν  
 30 ς γυναικός, μολῇ ὅπῃ x' ἐπ[ὶ] ἐβάλλῃ πὰρ τῷ δε[ξ]αστῇ  
 ἢ **Φέκαστο** ἔγρατται. Αἷ δέ x' ἀποθάνῃ μάτηρ τέκνα καταλειπό-  
 νσα, τὸν πατέρα καρτερόν ἤμ[εν] | τῶν ματρωῶν, ἀποδοῖθαι δὲ μὴ  
 35 μὴδὲ καταθέμεν, αἷ κα μὴ τὰ τέκνα ἐπαινέσῃ ὁρομέες ἰόντες·  
 α]· δέ τις ἄλλῃ πρίαιτο ἢ κατὰθειτο, τὰ μὲν χορήματα ἐπὶ τοῖ-  
 40 ς τέκνοις ἤμ[εν], τῷ δὲ πριαμ[ε]νῷ ἢ καταθεμένῳ τὸν ἀποδο-  
 ῖμενον ἢ τὸν καταθέντα τὰν | διπλείαν καταστᾶσαι τῶν τ-  
 ιμῶν καὶ τί x' ἄλλ' ἀτάσῃ, τὸ ἀπλόον. αἷ δέ x' ἄλλαν ὀπυῖν, τὰ τ-

VI. 1. (δ)δ F.—23. ἀτάσῃ F., Blass; ἀτας ἦι C., BZ., BB.—31. **Φέκαστο** F., BB.; **Φεκάστω** C., BZ., Blass.—36. ἐπαινήσῃ C.—42. διπλήαν C.

<sup>1</sup> Continued from vol. I. of JOURNAL, p. 350.

## TRANSLATION.

As long as a father lives, no one shall purchase any of his prop-  
erty from a son, or take it on mortgage; but, whatever the son *Property*  
himself may have acquired or obtained by inheritance, he may sell if *Rights.*  
he will: nor shall the father sell or promise the property of his  
children, whatever they have themselves acquired or succeeded to,  
nor the husband that of his wife, nor the son that of the mother.  
And, if any one should purchase, or take on mortgage, or accept a  
promise, otherwise than as written in these writings, the property  
shall still belong to the mother and the wife, and the one who sold  
or mortgaged or promised shall pay to the one who bought, or  
accepted the mortgage or promise, two-fold, and, if he shall have  
caused any other loss, he shall pay one-fold in addition; but, as  
regards transactions under earlier laws, there shall be no ground for  
action. But, if the defendant shall contend in court, in relation to  
the matter about which they are disputing, that it does not belong to  
the mother or the wife, the case shall be adjudicated as is proper  
before the judge, as each thing is written.

If a mother die leaving children, the father shall be trustee of the  
mother's property, but he shall not sell or mortgage unless the  
children assent, being of age; and, if any one should otherwise pur-  
chase or take on mortgage, the property shall belong to the children;  
and to the purchaser or mortgagee the seller or mortgagor shall pay  
two-fold the value, and, if he shall have caused any other loss, one-fold.  
But, if he wed another wife, the children shall have control of the  
mother's property.

- 45 ἐκν[α τῶ]ν [μα]τρῶϊων καρτερὸν[ς] ἦμεν. Αἱ κ' ἐδ' οὐ(σ)[πραξίας] φέ-  
 ρ(α)[ται] ἐξ ἀλλοπολίας ὅπ' ἀν[άνκας] ἐχόμενος κ' ἐλο[μ]ένω τι-  
 50 ς λύσεται ἐπὶ τῷ ἀλλυσαμέν[ω] ἦμεν πρίν κ' ἀποδῶ τὸ ἐπιθά-  
 λλον. αἱ δὲ κα μὴ ὁμολογίω[ν]τε ἀμφὶ τὰν πληθύν ἢ μὴ ἐλομέ-  
 ν[ω] αὐτῷ λύσασθαι, τὸν δικαστὰν ὁμνύοντα κρίνεν πορτὶ τὰ  
 55 μ[ολο]μέ[να]. οεκεθεροτ(?)ονΑΓ
- VII ἐπὶ τὰν ἐλευθέραν ἐλθὼν ὀπνίη, | ἐλεύθερ' ἦμεν τὰ τέκνα, αἱ δὲ κ'  
 ἂ ἐλευθέρα ἐπὶ τὸν θῶλον, θῶλ' ἦμεν τὰ τέκνα. αἱ δὲ κ' ἐς τὰς αὐτ-  
 5 ας ματρὸς ἐλεύθερα καὶ θῶλα | τέκνα γένηται, ἢ κ' ἀποθάνῃ ἂ  
 μάτηρ, αἱ κ' ἢ χορήματα, τὸν ἐλευθέρων ἐχεν· αἱ δ' ἐλευθέροι  
 10 μὴ ἐξέειν, τὸν ἐπιθαλλόν[τα]ν ἀναλῆθαι. Α[ἱ] κ' ἐξ ἀγ-  
 οράς πρ[α]μ[ε]νος θῶλον μὴ π[ε]ραιώσῃ τὰν **Feξήκοντ'** ἀμ-  
 ερῶν, αἱ τινὰ κα πρόθ' ἀδεχ[ή]χῃ ἢ ὕστερον, τῷ πεπαμμέν-  
 15 ω ἔνδικον ἦμεν. Τὰμ πα[τ]ρ[ω]χ[ω]ν[ω] ὀπνίεθαι ἀδελφι-  
 ῶ τῷ πατρὸς τῶν ἰόντων τῷ | πρεστ[ε]στ[ω]ν· αἱ δὲ κα πλῆες πατ-  
 20 ριῶχοι ἴωντι κ' ἀδελφ[ω]ι τῷ πα[τ]ρ[ω]χ[ω]ν[ω] ἐπεπρεγίστω ὀπνί-  
 εθαι· αἱ δὲ κα μὴ ἴωντι ἀδελφ[ω]ι τῷ π[α]τρός, υἱέσθ' δὲ ἐξ ἀδελ-  
 φῶν, ὀπνίεθαι ἰῶ τῷ [ε]ς τῷ π[ε]ρεγίστω· αἱ δὲ κα πλῆες ἴωντ-  
 25 ε πατριῶχοι κ' υἱέες ἐξ ἀδελφῶν, ἀλλω ὀπνίεθαι τῷ ἐπ-  
 ἰ τῷ ἐς [τ]ῷ πρεστ[ε]στ[ω]ν. μίαν δ' | ἔχεν πατριῶχ[ω]ν τὸν ἐπιθάλλ-  
 30 λοντα, πλῆαθ' δὲ [μ]ή. ἂδ δὲ κ' ἀν[ω]ρος ἢ ὁ ἐπιθάλλων ὀπνίεν ἢ  
 ἂ πατριῶχος, [σ]τέγαν μὲν αἱ | κ' ἢ ἔχεν τὰν πατριῶχον, τῷ  
 δ' ἐπικαρπίας παντὸς τὰν ἡμ[ί]ναν ἀπολαγχάνεν τὸν ἐπιθ-  
 35 ἄλλοντα ὀπνίεν. αἱ δὲ κ' ἀπόδρομος ἰὼν ὁ ἐπιθάλλων ὀπνί-  
 ειν, ἡβίον ἡβίονσαν μὴ λῆ ὀπνίεν, ἐπὶ τῇ πατριῶχῳ ἦμε-  
 40 ν τὰ χορήματα πάντα καὶ τὸν κ[α]ρπὸν πρεῖν κ' ὀπνίη· αἱ δὲ κα  
 δρομὲς ἰὼν ὁ ἐπιθάλλων ἡβίονσαν λειόνσαν ὀπνίε-  
 θαι μὴ λῆ ὀπνίεν, μολῆν τῶς | καδεστάνς τῶς τὰς πατριῶ-

VI. 46-47. αἱ κ' ἐδδν . . . . . περ . . . . . ἐξ F.; αἱ κ' ἐδ' οὐ(σ)[μενία γῶν]? περ(ᾱ)[ε  
 τι](ς) ἐκς C.; ἐδ' οὐ[σμενίαν]ς περ(ᾱ)[ε] BB.; οὐ(σ)[πραξίαν](?)—52. ἢ μὴ and space  
 for letter, F.; ἦμε[ν] C.; μῆδ(?)—55. οεκεθεροτ(?)ονΑΓ copy; [Αἱ δὲ κ' ὁ ἐλευθέρος]  
 F.; ὁ ἐ(λ)ε(ν)θερωτ(ς) α(Ι)[κ' C.; ὁ ἐκεῖθ' ἐρωτῶν α(Ι κ') BZ.; ὁ ἐκεῖθ' ἐρωτῶν ἔ BB.

VII. 9. τὸνς C.—13. ἀδικηκίη F.; ἀδικ' ἐκρη ἢ ὕστερον C.; ἀδικήκη ἢ: so D., BZ.,  
 BB.—20. ἐπὶ πρεγίστω C.

If any one be brought out of misfortune from sojourn abroad (where he has been) held by force, and one have released him at his desire, he shall be in the power of the one who released him until he pay what is proper; but if they do not agree upon the amount, or he did not himself request (the other) to release him, the judge shall decide according to the pleadings.

*Ransomed  
prisoners.*

If a free (?) man going to a free woman shall wed her, the children shall be free; but if the free woman to a slave, the children shall be slaves; and if from the same mother free and slave children be born, if the mother die and there be property, the free children shall have it; but, if free children should not be born of her, her relatives shall succeed to the property.

*Miscegenation.*

If a person should purchase a slave from the market-place, and should not complete the transaction within 60 days, in case he shall have done any wrong before (the 60 days have expired) or after, there shall be ground for action against the one who has acquired him.

*Responsibility  
for the acts  
of a slave.*

The heiress shall marry the brother of her father, the eldest of those living; and, if there be more heiresses and brothers of the father, they shall marry the eldest in succession. But if there be no brothers of the father, but sons from his brothers, she shall marry the first one from the eldest (brother); and if there be more heiresses and sons from brothers, they shall marry the sons of the eldest in succession. The groom-elect (relative to whom she belongs by right) shall have one heiress, but not more. As long as the groom-elect is too young to marry, or the heiress, a house, if there be one, the heiress shall have, but the groom-elect shall receive half of the income of all the property. And if the groom-elect be still under 17 but above puberty, and the heiress also, but he do not wish to marry her, all the property shall belong to the heiress, and the income, until he marry her. But if he, being of age (above 17), do not wish to marry the heiress, now of proper age and willing to marry him, the relatives of the heiress shall bring the matter to trial, and

*Rights and  
Obligations of  
heiresses.*



45 ὥχω, ὁ δὲ [δ]κα[σ]τ[ᾱς] δα[αξᾱ]τω ὀπιέν ἐν τοῖ[ς] δ[υ]οῖς μη-  
νσί· αἱ δὲ κα μὴ ὀπιή, ᾗ ἔγρα[τα], τὰ χορήματα πάντ' ἔχονσα-

50 ν αἱ κ' ἢ ἄλλος, τῷ ἐπιβάλλοντ[ι], αἱ δ' ἐπιβάλλον μὴ εἶη, τᾶς  
φυλᾶς τῶν αἰτιόντων ὀτιμ[ί] κα λῆ ὀπιέθαι. αἱ δὲ κα τῷ-  
ι ἐπιβάλλοντι ἡθίονσα μὴ λῆ[ι] ὀπιέθαι ἢ ἄνθρωπος ἢ ὁ ἐπι-  
βάλλ[λ]ων [κα]ῖ μ[ὴ] λῆ μέν]εν

## VIII

ἁ πατρῴωχος, στέγαμ μὲν | αἱ κ' ἢ ἐν πόλει τὰμ πατρῴωχο-  
ν ἔχεν κ' ἄτε κ' ἐνῇ ἐν τῇ στέγῃ, τῶν δ' ἄλλων τὰν ἡμίσαν θ-

5 εαλαχόνσαν ἄλλω ὀπιέθ[αι] τᾶς φυλᾶς τῶν αἰτιόντων

ὀτιμ[ί] κα λῆ· ἀποδατῆθαι δ[ι]ε τῶν χορημάτων ἰϥ. αἱ δὲ μὴ

10 εἶεν ἐπιβάλλοντες ταῖ (πα) π[α]τρῴωχων ἄ[ι] ἔ[γ]ρατται, τὰ χο-  
ρήματα πάντ' ἔχ[ου]σαν τᾶς φυλᾶς ὀπιέθ[α]ι ὀτιμ[ί] κα λῆ.  
αἱ δὲ τᾶς φυλ[ᾱ]ς μήτις λείοι ὀ[π]ρίεν, τῶς καθεστάνς

15 τῶς τᾶς πατρῴ[ω]χω Fε[ῖ](π)αι κατὰ [τὰν φυλ]άν, ὅτι οὐ (λ)[ῆ] ὀ[π]ρί-  
έν τις; καὶ μέν τις [κ' ὀ]πιή, ἐ[ν] ταῖς τριάκοντα, ἢ κα Fεῖπον-

20 τι· αἱ δὲ μ[ὴ], ἄλλω ὀπιέθαι ὀτιμ[ί] κα νόναται. αἱ δὲ κα πατρὸ-  
ς δόντος ἢ ἀδελφῶ πατρῴ[ω]χος γένηται, αἱ λείοντος ὀπ-  
ρίεν ᾧ ἔδωκαν, μὴ λείοι ὀπιέθαι, αἱ κ' ἐστετέκνωται, δια-

25 λαχόνσαν τῶν χορημάτων ᾗ ἔ[γ]ρατται, [ἄλλ]ω ὀπιέ[θαι] τᾶς φ-  
υλ[ᾱ]ς· αἱ δὲ τέκνα μὴ εἶη, πάντ' | ἔ[χ]ου[σ]αν τῷ ἐπιβάλλον[τ]ι ὀπι-

30 έθαι αἱ κ' ἢ, αἱ δὲ μ[ὴ], ᾗ ἔ[γ]ρατται. ἀνὴρ αἱ ἀποθάνοι πατρῴ-  
ώχων τέκνα καταλεπόν, αἱ κα [λ]ῆ | ὀπιέθω τᾶς φυλᾶς ὀτιμ[ί] κα ν-  
όναται, ἀνάγκη δὲ μ[ὴ]· αἱ δὲ τέκνα μὴ καταλεποί ὁ ἀποθανών,

35 ὀπιέθαι τῷ ἐπιβάλλοντι ᾗ ἔ[γ]ρατται. αἱ δ' ὁ ἐπιβάλλον τ-  
ὰν πατρῴωχον ὀπιέν μὴ ἐπ[ι]δαμος εἶη, ἁ δὲ πατρῴωχος

40 ὠρίμα εἶη, τῷ ἐπιβάλλοντι ὀπιέθαι ᾗ ἔ[γ]ρατται. πατρῴω-  
χον δ' ἡμεν, αἱ κα πατὴρ μὴ ἢ ἢ ἀδελφὸς ἐς τῷ αὐ[τῷ] πατρός, τῶν  
δὲ χορημάτ[ων] κα[ὶ] ὀτερόνς ἡμεν τ[ᾱς] Fερ[γ]α[σ]ία[ς] τῶς [πατρῴων]

VII. 45. δικαδῆτω C.—51. ὀτιμ: so C.; ὀτιμ F.—55. ὀπιέν [ῆ] F.; [ὀπ]ό(κα)  
[ἐτ' ἡθ]σ C.; μέν]εν BZ, BB.

VIII. 4. ἡμί(ν)αν C.—9. π(αι)ατρ. F.; τὰι πατρῴωκοι C.—15-16. ε...αι κατὰ...  
ανοτιο...ὀ]πρίεν F.; text C.—17. τις? [ὀ]πιή F.; τις [κ' ὀ]πιή C.—20, 32. νόναται  
F., BZ, BB.; κ' ἀνίναται C.—21. δόντος F.; δόντος C., BZ, BB.—33. ἐπιδάμωσει C.—  
41. αἱ C.—ῆ: so C.; εἶη F.



the judge shall order him to marry her within two months; and, if he do not marry as is written, she with all the property shall wed the next in the succession, if there be another; but, if there be none, she may marry any one she wishes, of the tribe, that may demand her hand.

And if she, being of age to marry, do not wish to marry the groom-elect, or the groom-elect be too young and the heiress do not wish to wait, a house, if there be one in the city, the heiress shall have, and whatever there is in the house, but, sharing half of the remaining property, she may marry another, whomsoever she wish of her tribe demanding her hand; and they shall portion off (the half) of the property to the first one.

If the heiress should have no kinsmen within the limits prescribed, holding all the property she may marry any one of the tribe she wishes. But, if no one of the tribe desire to marry her, the relatives of the heiress shall proclaim throughout the tribe "Does no one wish to marry her?" and, if any one will marry her, (it shall be) within the 30 days, as they shall have declared; and, if not, she shall wed another, whomsoever she may be able to.

If she become an heiress after her father or brother shall have given her in marriage, in case she do not wish to marry the one to whom they gave her, though he be willing, if she have borne children, sharing (with him) the property as is written, she shall wed another of the tribe; but, if she have no children, with all the property she shall marry the groom-elect if there be one, but, if not, as is written.

In case a husband should die leaving children to an heiress, if she wish, let her wed any one of the tribe she may be able to, but it is not compulsory. If the deceased should leave no children, she shall marry the groom-elect as is written. If the one to whom it falls to marry the heiress should not be in the country, and the heiress be of age to marry, she shall wed the (next) in succession as is written. She shall be an heiress if she have no father, or brother from the same father, and the father's relatives shall have control of the work-

- 45 καὶ τῆς ἐπικαρπίας δὲ [αλ]α[νχά]ν[εν] [τ]ὸν ἡμίαν, ἃς x' [ἄνωρο]ς ἦ.  
αἱ δ' ἂν [ὦ]ρω ἰάττα μὴ εἶη ἐπιδάλλων, τὸν πατροφῶχον καρ-  
50 τεράν ἢ [μ]εν τῶν τε χορημάτων x||αἱ τῷ καρπῷ, καὶ x' ἂν [ω]ρος ἦ, τ-  
ράφειθαι [πᾶ]ρ τῇ μητρί. αἱ δὲ μ[ά]τηρ μὴ [εἶ]η, παρ τ[ο]υ[ς] μ[ά]τρως  
τράφειθ[αι]. αἱ δὲ τις ὀπνίοι τὰν πατροφῶχον ἄλλα δ' [εἶ]ρατται  
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- IX τὸνς ἐπιθαλλόντανς, αἱ x' | ἀποθανών τις πα[τρ]ωχον κα-  
ταλίπη, ἢ ἀ[π]ὸ τὸνς τὰ χορήματα | ἀρτύνει ἢ παρ τὸνς μητρώων-  
5 ς καταθέμεν· [αἱ δ' ἄλλω ἀποδοῖντο | ἢ καταθεῖν, μὴ] δικαίαν ἡμεν τ-  
ὸν ὄντων καὶ τὸν κα[τά]θεσιν· αἱ δ' | ἄλλος πρί[α]υτο τις χορήματα ἢ  
10 κατὰθετο τῶν τῆς πα[τρ]ωχῶ, τ||α [μ]έν [χορ]ήματα ἐπὶ τῇ πατροφῶχ-  
ῳ ἡμεν, ὁ δ' ἀποδοῖμενος ἢ κατ[α]θεῖνς τῷ πριαμένῳ ἢ καταθε-  
μένῳ, αἱ κα νικαθῇ, διπλῇ κα[τά]στασει, καὶ τί x' ἄλλ' ἀτάσῃ τ-  
15 ὁ ἀπλόον ἐπικαταστασεῖ, αἱ [τᾶ]δε τὰ γ[ράμ]μα[τα] εἰρατται τ-  
ὦ[ν] δ' ἐπὶ πρῶτα [μὴ] ἐν[δ]εον ἡμεν. | αἱ δ' ὁ ἀντίμολος ἀπομ[ολ]ί-  
20 εἰ ἀ[ν]φ[ε]ρ[ε] τὸ χρέος, ὧ x' ἀνφειμολί[ων]τι, μὴ τῆς πατροφῶχῳ [ἢ]μ[ε]ν,  
ὁ δ[ε] [α]στᾶς ὀμνύς κρινέτω· αἱ | δὲ νικάσαι, μὴ τῆς πατρ[ω]χῶ-  
ῳ ἢ [μ]ε[ν], μολῇν ὅπῃ x' ἐπιβάλλῃ ἢ | **Φέ**καστο εἰρατται. Αἱ ἀ[ν]δ[ε]ξ-  
25 d[μ]ε[ν]ος ἢ νενικαμέν[ος] ἢ ἐν[κ]οιωτᾶνς ὀφέλω[ν] ἢ διαβαλὸ[μ]ε-  
νος ἢ δια**Φ**επόμενος ἀπο[θ]ά[ν]οι, ἢ τούτῳ ἄλλος, ἐπιμολ-  
30 ισά(τ)ω πρὸ τῷ ἐνιαντῷ, ὁ δὲ δεκα[σ]τᾶς δικαδοδέτω πορτί τὰ [ἀ]ποφ-  
ωνιόμενα, αἱ μὲν κα νίκας ἐπ[ι]μολῇ, ὁ δικαστᾶς x' ὁ μνάμων  
αἱ κα δῶη καὶ ποικατεύῃ, οἱ δὲ μ[α]ίτυρες οἱ ἐπιβάλλοντες· ἀνδοχ-

VIII. 45. τ[ο] (ἄς) [δ' ἐπικαρπ]ίας C.—52. μὴ [ἦ παρ] τοῖ[ς] μ[ά]τρως C.; [εἶ]η ἐπὶ  
μάτρως F.—55. ἰδ[ε] [θ]ω ἐ[ν]αν[τι] κ[α]σ[μ]ω C.

VIII. 55.—IX. 1-8. (?) ιε ??? ... τι κοσ? || τὸνς ἐπιθα[λλόντανς] ἔκιν τὰ κ[α]ρ[ε]  
ματα. αἱ κα πα[τρ]ωχον κα[τά]λιπε, ἐ αἱ [τοῖ] κρέματ' ἐκοντι, [τὸς] πατρῶνς καὶ τὸνς μητρώωνς  
καταθέμεν [καὶ ἀποδοῖναι τὸν || **Φ**ων αὐτῶν καὶ] δικαίαν ἔμεν τ[ὸν] ὄντων καὶ τὸν κα[τά]θεσιν.  
ἄλλα δ' αἱ πρί[α]υτο BB.

IX. 1-2. ἐπιθα[λλόντανς], αἱ κα πατήρ ἢ ἀδελφὸς πα[τρ]ωχον C.—3-4. αἱ [τῶν] μὴ  
ιόντων, τὸνς πατρῶνς καὶ τὸνς C.—5-6. [ἢ ἀποδοῖναι τὰ κρήματ' αἱ x' καὶ] C.—7-8.  
κα[τά]θεσιν, αἱ δ' ἄλλαι πρί[α]υτο C.—14. ἄσας ἦ C.—17. το[ῖ]δ' δ' C.—24. **Φ**εκάστω C.—  
25. νενικαμέν[ος] ] οἴστανς F.; [ς τις] C.; [ἢ ἐν]κοιωτᾶνς Blass, BB.—ὀφέλω[ν] BB.,  
Blass.—28-29. ἐπιμολίσαι (τ)ῷ πρώτῳ F.; ἐπιμολ(έν) αἱ ὁ πρώτῳ C.; ἐπιμολησάτω πρὸ  
τῷ Blass, BB.—32. ἐπιμολῇ ὁ δικαστᾶς C.—34-35. ἀνδοχᾶ(δ) δ' ἐχεν κ' οἴστανς F.; ἀνδοκα  
δ' ἔκιν κ' οἴσταν, καὶ διὰ βωλᾶς C.; text Blass, BB.

ing of the property, and share half the proceeds, as long as she is unmarried. In case there be no groom-elect while she is unmarried, the heiress shall have possession of the property and the income, and as long as she is unmarried she shall be brought up by her mother; but, if she have no mother, she shall be brought up among her mother's relatives. And if any one should marry an heiress, while it is written otherwise . . .

If any one dying leave an heiress, the kinsmen shall either themselves manage the property or mortgage it among the mother's relatives; and, if they should sell or mortgage it to any other, the sale and mortgage shall not be legal; and, if anyone else should purchase the property or take a mortgage (on any part) of that of the heiress, the property shall belong to the heiress, and the seller or mortgagor to the buyer or mortgagee, if he be convicted, shall pay double, and if he have done any further harm, he shall pay an equivalent besides, as these writings are written; but, in case of previous transactions, there shall not be ground for action. But, if the defendant should contend, in relation to the thing about which they are disputing, that it does not belong to the heiress, let the judge under oath decide; and, if he should gain his case, to the effect that it does not belong to the heiress, suit (for ownership) shall be tried, as is proper, according as each thing is written.

If a person should die who has become a surety, or lost a suit, or owes a loan, or has defrauded any one, or has entered into an agreement, or another (hold like relations) towards him, the case shall be reviewed before the close of the year, and the judge shall decide according to the testimony; if indeed the case be renewed in relation to a judgment (against the deceased), the judge and the clerk of the court, if he be alive and a citizen, and the witnesses who are

*Actions in  
some special  
cases.*

- 35 α(δ) δὲ x' ἐνκοιωτῶν καὶ διαβολᾶς x|αὶ διρῆσιος, μαίτυρες οἱ ἐπιβ-  
 ἄλλοντες ἀποφωνιόντων. ἡ δὲ x' ἀ|ποΦείποντι, δεκαδδέτω ὁμ-  
 40 σας τὰ αὐτῶν καὶ τὸν ματύρ|ανς ναῖν τὸ ἀπλόον. Ἰϛς α-  
 ἱ x' ἀνδέξῃται ἄς x' ὁ πατῆ(δ) δῶν, | αὐτὸν ἀλῆθαι καὶ τὰ χορήμια  
 ἄτι κα πέπαται. Αἱ τίς κα πέρα|ε συνπλ(ε)|ίχ|ση ἡ ἐς πέρ[αν] ἐπι-  
 45 θέντι μὴ ἀποδιδῶ, αἱ μὲν x' ἀ|ποφωνιόντι μαίτυρες ἡβίον-  
 ες, τῷ ἑκατονστατήρῳ καὶ πλίονος τρέες, τῷ μείονος μέτετ' ἐ-  
 50 ς τὸ δεκαστάτηρον δ[ύ]ο, τῷ με||ονο[ς] ἔ|να, δεκαδδέτω πορ[τ]ῆ τὰ  
 ἀποφω[ν]όμενα· αἱ δὲ μαί[τ]υρε[ς] μὴ [ἀπ]ο[φ]ωνιόειν, ἡ x' ἔ[λ]θῃ ὁ συ-  
 ναλλᾶζα[ν]ς, ὅτερον κα ἔλγ[τα]ι ὁ | μενφό[μ]ενος ἡ ἀπομόσαι ἡ συν-

## X

- 11 χρεος - - - - - [ἀ]ποδόν-  
 τανς το - - - - - Ματρί  
 15 δ' υἱ[ν] ἡ ἀνδρα γυναικὶ δόμεν ἐ|κατὸν στατήρα[ν]ς ἡ μ|εῖον, π-  
 λιον δὲ μῆ· αἱ δὲ πλῆα δοίῃ, αἱ | κα λείωντ' οἱ ἐπεβάλλοντες τ-  
 20 ὦν ἄργυρον ἀποδόντες τὰ χρ|ήματ' ἐχόντων. Αἱ δὲ τις ὀφέ-  
 λων ἄργυρον ἡ ἀταμένος ἡ μ|ολιομένης δίχας δοίῃ, αἱ  
 μῆ εἴῃ τὰ λοιπὰ ἄζια τᾶς ἄ|τας, μῆδὲν ἐς χρέος ἤμην τᾶν  
 25 δόσιν. \*Αντρω[π]ον μῆ ὠνῆθα|[ε] κατακείμενον, πρὶν x' ἀλλύσ-  
 ηται ὁ καταθένης, μῆδ' ἀμφίμολον, μῆδὲ δέξασθαι μῆδ' ἐπισ-  
 30 πένσασθαι μῆδὲ καταθέσθαι· αἱ || δὲ τις τούτων τι φέρξαι, μῆδ-  
 ἐν ἐς χρέος ἤμην, αἱ ἀποφωνιόειν δύο μαίτυρες[ς].  
 \*Ανφανσιν ἤμην ὅπω κά τιλ | λῆ. ἀμφαίνεσθαι δὲ κατ' ἀγοράν  
 35 καταφελμένων τῷμ πολιατᾶ|ν ἀπὸ τῷ λάω ὃ ἀπαγορεύοντι.  
 ὁ δ' ἀμφανόμενος δότω τᾶ|ε ἑταρείᾳ τᾶ φᾶ αὐτῷ ἱαρε-

IX. 37. ἡ: so C.; ἡ F., BZ., BB.—38. ὁμόσαντα αὐτὸν BZ., Blass.—42. (ἀγ)ίθαι C., BZ., BB.; ἀγῆθαι Blass.—43–44. περα . . . . . ἐπιθέντι F.; πῆραι συν[ναλλάκ]σι ἡ ἐς πῆρ(αν) ἐπιθέντι C.; συν[ναλ]λ[ἀ]κ[σα]ντι ἐ ἐς π[έ]ρ[ας] BZ.; συνπλη[ρώ]σι ἡ ἐς πέρ[αι] Blass; συνα(λ)λ[ἀ]κ[σα]ς ἐ ἐς πέρ[α]ς BB.—48. μῆτρες C.—49. τὸ δ) F.; τὸ C.—50. μείονο(δ) (δ' ἐ)ν(ς) C.—52–53. ἐ[λ]θῇ ὁ συναλλᾶζα[ς] C. στερων [ἀν ?]ελέ[θαι] F.; ἐ[λ]θῃ ὁ συναλλᾶκσα[ν]ς C. ὅτερον (μ)ῆ λῆι, (ἀ) C.; text, Blass.

X. 10–14. BB. insert the fragment found by Halbherr: [στατῆρῶ]ν || κρεος . [τὸς δ' ἐπ]ιβα[λλόν]τας, | αἱ ὁ ἀνῆρ π[λ]ῖα δ[ο]ίῃ, ἀ]ποδόν[τα]ς τὸ [ἀργύρ]ιον [ἔ]κεν τὰ κρ[ι]ῆματα, αἱ κ[α] λῆ[ν]τι[οντι].—14–15. πᾶρ] ματρί δ' υἱ[ς] (αἱ κα λῆι, καταθέμεν) C.—21. ἀτάμενος, F., C.; ἀταμένος BZ., BB., Blass; —ἐμολιομένης C.—26. κατῆνῃται F.; κ' ἀρτί(σ)ηται C.; text BB.—33. ὁπόκα C.—36. λαῶ ὁ ἀπαγορεύοντι C.—39. ἱαρίων καὶ προκόων C.

heirs (shall testify); while in a case of surety, and loans, and fraud, and agreement, the heirs shall testify as witnesses; but, if they refuse, let the judge under oath pass upon their case and declare that (their opponents) have judgment against the witnesses in the amount in question. If a son should become surety while his father is living, he shall be held, himself and the property which he owns.

If any one have a dispute about a venture at sea, or do not reimburse one who has contributed to a venture, should witnesses of age testify,—3 in a case of 100 staters or more, 2 in a case of less down to 10 staters, 1 for still less,—let the judge decide according to the testimony; but, if witnesses do not depose, in case the contracting party comes, whichever of the two courses the complainant may choose, either to make oath of denial, or . . .

A son may give to a mother or a husband to a wife 100 staters or less, but not more; if he should give more, his heirs shall have the property, (only) paying the money if they wish.

*Legality of  
Gifts.*

If any one owing money, or under obligation for damages, or during the progress of a suit, should give away anything, unless the rest of his property be equal to the obligation, the gift shall be null and void.

One shall not buy a man while mortgaged until the mortgagor release him, nor one in dispute, nor accept him (as a gift), nor accept a promise or mortgage upon him; and, if one should do any one of these things, it shall be void if 2 witnesses should testify.

Adoption may take place whence one will; and the declaration shall be made in the market-place, when the citizens are gathered, from the stone from which proclamations are made. And let the adopter give to his *hetaireia* a victim and a *prochoös*

*Adoption.*

- 40 ἴον καὶ πρόχοον **Φοίνω**. καὶ || μὲν **κ'** ἀνέληται πάντα τὰ χορή-  
ματα καὶ μὴ συννη γνήσια τέκνα, τέλλεμι μὲν τὰ θίνα καὶ  
τὰ ἀνθρώπινα τὰ τῷ ἀνφαναμένῳ **κ'** ἀναλῆθαι ἄπερ τοῖς γ-  
45 νησίοις ἐγ[ρ]ατται· αἱ [δ]έ **κ[α μ]** ἢ | λῆ τέλλεν ἃ ἐγρατται, τὰ **χ[ρ]** ἢ-  
ματα τὸνς ἐπιβαλλόντανς ἐχ[ε]ν. αἱ δέ **κ'** ἢ γνήσ[ε]ι τὰ τέκνα τῷ ἀν-  
50 φαναμένῳ πεδὰ μὲν τῶν ἐρσ||ένων τὸν ἀμφαντὸν ἄπερ αἱ θ-  
ῆ[λε]ται ἀπὸ τῶν ἀδελφῶν λανθά|νουντι. αἱ δέ **κ'** ἔρσενες μὴ ἴων-  
τι, θῆλεια δέ, [**F**]ισ**Φόμοιρον** ἢ-  
XI μιν τ|ὸν ἀφαντὸν καὶ μὴ ἐ|πάνανκον ἤμιν τέλλεν τ[ὰ τ-  
ὦ ἀν]φαναμένῳ καὶ τὰ χορήμα|τ' ἀναλῆθαι, ἅτι κα κατα[λίπ-  
5 ἡ ὁ ἀν]φανάμενος, πλίει δέ τὸν | ἀφαντὸν μὴ ἐπιχωρῶν. [αἱ δ'  
ἀπο]θάνει ὁ ἀφαντὸς γνήσια | τέκνα μὴ καταλείπων, πὰρ τὸ[νς τ-  
10 ὦ ἀν]φαναμένῳ ἐπιβαλλόνταν||ς ἀνωρῶν τὰ χορήματα. αἱ δ[έ κα  
λῆ?], ὁ ἀφανάμενος ἀπο**Φεπ**|άθθω κατ' ἀγορὰν ἀπὸ τῷ λά[ω, ὦ  
ἀπα]γορεύοντι, κατα**Φε**λμέν[ων τῶν πολιτῶν. ἀνθέμε[ν δέ  
15 δέκα σ]τατήρανς ἐδ δαστ[ήριον, ὁ δέ μνάμων π[ρ]ὸ ξεν-  
ίῳ ἀποδοῖτω τῷ ἀπορρηθέντι. | γυνὰ δέ μὴ ἀμφανέθθω μὴ δ'  
20 ἀνθρος. χορῆθαι δέ τοῖδδε ἄ||ε τάδε τὰ γράμματα ἐγραψε,  
τῶν δέ πρόθθα ὅπα τις ἐχῆ ἢ ἀ|μφαντῷ ἢ πὰρ ἀμφαντῷ μὴ ἔτ' ἔ-  
νδικον ἤμιν. | Ἀντρωπον ὅς **κ'** ἀγῆ πρὸ δίκας,  
25 αἰεὶ ἐπιδέχεται. | Τὸν δαστάν, ὅτι μὲν κατὰ  
ματύρανς ἐγρατται δεκάδδ|εν ἢ ἀπώμοτον, δεκάδδεν ἢ ἔ-  
30 γρατται, τῶν δ' ἄλλων ὁμνύντ||α κρίνεν πορτὶ τὰ μοιζόμεν-  
α. Αἱ **κ'** ἀποθάνῃ ἀργυρον | ὀφέλων ἢ νενικαμένος, αἱ μέ-  
ν κα λείωντι οἷς **κ'** ἐπιδάλλῃ | ἀναλῆθαι τὰ χορήματα, τὰν ἄ-  
35 ταν ὑπερκατιστάμεν καὶ τὸ | ἀργύριον οἷς **κ'** ὀφέλῃ, ἐχόντ-  
ων τὰ χορήματα· αἱ δέ κα μὴ λείωντι, τὰ μὲν χορήματα ἐπὶ τοῖ-  
40 ς νικάσανσι ἤμιν ἢ οἷς **κ'** ὀ|φέλῃ τὸ ἀργύριον, ἄλλαν δέ  
μηδεμίαν ἄταν ἤμιν τοῖς ἐπιδάλλονσι. ἀ[λ]ῆθαι δέ ὁ-

X. 50. αἶπερ F.; ἄπερ C.—53. ἔχεν F.; ἢ[μιν τ]ὸν C.

XI. 4. ἀναλ(ῆ)θαι C.—πλίει F.; πλίει C.—6. [αἱ δέ **κ'**] F.; [αἱ **κ'**] C.—10. αἱ  
δ[έ μὴ λῆ] ὁ C.—12. λα[ὶ ὁ C.—14-15. ἀνθέμε[εν . . . . σ]τατήρανς C.; ἀναθέμε[εν δέ  
. . . . σ]τατήρανς F.—16. ὁ τῷ κενίῳ C.—22. ἀμπάντιν C.; ἀμφαντῷ F.—24. κα λῆ C.—  
25. αἱ ἢ, F.; αἰεὶ: so C.—42. α[λ]ῆθαι F.; ἀ[γ]έθαι C.

of wine. And if he (the adopted) receive all the property and there be no legitimate children, he shall fulfil all the divine and human obligations of his adoptive father, and receive as is written for legitimate children; but, if he be not willing to do as is written, the kinsmen shall have the property. If there be legitimate children of the adoptive father, the adopted son shall receive with the males just as the females receive from the brothers. But, if there be no males, but females, the adopted son shall have an equal share, and it shall not be compulsory upon him to pay the obligations of the adopter and accept the property which the adopter leaves, for the adopted shall succeed to no more (than an equal share with the daughters). If the adopted son should die without leaving legitimate children, the property shall return to the heirs of the adopter. If he wish, the adopter may renounce him in the market-place, from the stone from which proclamations are made, when the citizens are gathered. And he shall deposit ten (?) staters with the court, and the clerk of the court shall pay it to the person renounced as a parting gift of hospitality. A woman shall not adopt, nor a person under puberty. These things shall (now) be transacted as (the law-giver) has written these writings, but in previous cases, however one hold (property), whether by adoption or from an adopted son, it shall still not be void.

If one take action by seizure against a man before trial, (the defendant) shall always receive him under his surety. *Supplemental provisions.*

Whatever is written for the judge to decide according to witnesses or by oath of denial, he shall decide as is written, but touching other matters he shall decide under oath according to the pleadings.

If a person die owing money or having a judgment against him, if those to whom it belongs to receive the property desire, they can pay the damages in behalf of the deceased, and the money to whom it is owing, and then have the property; but, if they do not wish to do so, the property shall belong to those who have won the suit or to those to whom the money is owing, and there shall be no other



πὲρ μ[ε]ν τῷ [πα]τρὸς τὰ πατρῷ|ία, ὑπὲ(δ) δὲ τῷ ματρὸς τὰ μα-  
 45 τρώ|ια. | Γυνὰ ἀνδρὸς ἃ κα κρίνεται,  
 ὁ δικαστὰς ὄρον αἷ κα δεκά|ση, ἐν ταῖς Φίκατι ἀμέραις ἀ-  
 50 πομοσάτω παρίοντος τῷ δικα||στῶ· ὅτι κ' ἐπικαλῇ προF[ε]πιδ-  
 ω [ὁ κατ']ἀρχων τῶ(δ) δίκας τῇ γυναι|κὶ καὶ τῷ δικαστῇ καὶ [τ]ῷ  
 [μνάμ]ονι προτέταρτον ἀντὶ μ-

## XII

[αυτῶρων] -----  
 15 Ματρὶ υἱὸς ἢ ἀ[ν]ήρ γυναικὶ | χορήματα αἱ ἐδόχε ἢ ἔγρατ-  
 το πρὸ τῶνδε τῶν γραμμῶν | μὴ ἐνδικον ἦμεν, τὸ δ' ὕστε-  
 20 ρον διδόμεν ἢ ἔγρατται. || Ταῖς πατρῴω|χοις αἷ κα μὴ  
 ἔωντι ὀρφανοδικαστῶν αἷ κα κ' ἄνθρωποι ἔωντι, χορῆ|θαι κατὰ  
 τὰ ἐγραμμένα. ὅπη δέ κα | πατρ[ω]ῶχος, μὴ ἰόντος ἐπι-  
 25 θάλλοντος μηδ' ὀρφανοδικαστῶν, παρ τῇ ματρὶ τράφ-  
 ται, τὸν πάτρωα καὶ τὸν μάτ|ρωα τὸν ἐγραμμένον τ-  
 30 ἂ χορήματα καὶ τὰν ἐπικαρπῆ||αν ἀρτύεν ὅπα κ' ἀνῶνται κά-  
 λιστα πρὶν κ' ὀπυίηται. ὀπυί|εθαι δὲ θυωδεαFετία ἢ πρὶ-  
 γονα.

XI. 47. ὀρκῶν C.—48. δικάσῃ ἐν τ. F. ἀμέραις, C.—49. δικαστῶ, C.—51. [τὸν δ'] ἄρκοντα δίκας C.; [τὸ ἐπ']ἄρκον BZ.; [δ' ὁ ἐπ']ἄρκων BB.—53. προτέταρτον: so C.; πρὸ τετάρτων F.

XII. 15. υἱὸς C.—23. ὅπη: so C.; ὅπη[ι] F.—30. κα (νύ)νανται F., BZ., BB.; κ' ἀναντῶ C.

## COMMENT.

COLUMN VI. 13. πρίατο ἢ κατάθειτο: πριάμενοι καὶ θέμενοι, Is. 5, 21; Dem. 1249; Ditt. S. I. G. 63, 40.

14. ἄλλα . . . ἔγρατται: A clumsy expression indeed (cf. viii, 54; Cauer, 119, 42).

33. At Athens the property, whether of mother or father deceased, fell to the sons as soon as they became of age; until that time it was administered by their guardians. Here the father, if living, still retains control of it after they are above 17, unless a stepmother is brought into the family (vi, 45), in which case Charondas also put a stigma upon the father (Diod. xii, 14).

46-47. δυσπραξίας: τὴν τούτου συμφάναν . . . συναχθεσθεις ἐπὶ τῇ ἀτυχίᾳ τῇ τούτου, of Nikostratos ransomed from slavery by Apollodoros, Dem. 1248.

loss to the heirs-at-law. The property of the father may be seized in behalf of the father, as also the mother's in behalf of the mother.

If a wife be separated from her husband, in case the judge decide upon an oath, let her take the oath of denial within 20 days in the presence of the judge: whatever he charges let the beginner of the suit announce to the woman and the judge and the clerk of the court, 4 days before in the presence of witnesses . . .

If a son have given property to his mother, or a husband to his wife, as was written before these writings, it shall not be illegal; but, hereafter, gifts shall be made as here written.

If heiresses have no *orphanodikastai* while they are unmarriageable, they shall be treated as written. And where, in default of a groom-elect or *orphanodikastai*, an heiress is brought up by the mother, the father's and mother's relatives that have been described shall manage the property and the income as they can best increase them until she marry. And she shall marry at 12 years or older.

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The Athenian law was, τοῦ λυσαμένου ἐκ τῶν πολεμίων εἶναι τὸν λυθέντα, ἐὰν μὴ ἀποδιδῶ τὰ λύτρα, Dem. 1250. I feel no confidence that the correct reading has yet been recovered here.—ἀλλοπολίας: cf. ἀλλοδημία [so C.]—ὅπ' ἀνάνκας ἐχόμενος: ὅπ' ἀνάγκης ἢ ὅπῳ δεσμοῦ καταληφθεὶς = ὅπῳ ἀνάγκης τινὸς καταληφθέντα, Dem. 1133, 14-16; Od. δ 557.—ἐλομένω: cf. Suidas, Φαίδων· ἐντοχὼν δὲ Σωκράτει ἡράσθη τῶν λόγων αὐτοῦ καὶ αἰτεῖ λύσασθαι.

52. τὰν πληθὸν: τὸ πλῆθος τοῦ ἀργυρίου, Cauer, 121, C. 36.

55. The reading here, as given by the copy, is so strange that it is impossible to determine what is meant. Attention is drawn by BZ. to the contrast between the groom's "going" to the free woman (vii, 1), and the free woman to the slave, as implying a difference of condition dependent on the house maintained or accepted by the free woman; and the Roman law, and examples from the "Syr.-Rom. Rechtsbuch," are cited to show a somewhat similar regulation elsewhere.

COLUMN VII. 3. Cf. ἡ γυνή πρὶν ὥς Ἀφοβὸν ἐλθεῖν, of marriage, Dem. 873.

9. ἐξεῖεν: Hm. v, 130: ἐξῆν· ἐξεγένοντο, Hesych.

12. περαιώσῃ: περαιωθῆναι· τελειωθῆναι, Hesych. Plato, Legg. 849. E. discountenances all credits, like the Thurians, Stob. II. Nom. 22. Cf. Plato, Legg. 936 D. E. [Non lasci passare, C.; ne l'a pas vendu, D.; nicht Ziel setzen lässt, BZ.; ins Ausland verkauft, Blass, BB.]

16. The law was the same at Athens (though sometimes violated, Is. 10, 5). The obligation to marry, however, did not cease with the father's brothers and sons, but was determined simply by the laws of consanguinity, Is. 1, 39, 3, 64, 10, 5; Plato, Legg. 924. If the heiress was poor, the next of kin could refuse to marry her, but was bound to give her a marriage-portion corresponding to his own fortune. "Regulations concerning heiresses were an object of chief importance in the ancient legislations, on account of their anxiety for the maintenance of families, as in that of Androdamos of Rhegium (Arist. Pol. II. 12, 14), and in the code of Solon (Plut. Sol. 20), with which the Chalcidean laws of Charondas appear to have agreed in all essential points (Diod. XII. 18)." (Müller, Dorians, III, 10, 4; Eng. ed.). Likewise the Spartan and many others, Aryan and non-Aryan. In the event of several heiresses, the Athenian law gave each an equal share in the property, as our code does, and they were severally married to relatives, the nearest having the first choice (Smith, *Dict. Antiq.*, "Epicleus"). But, if the heiresses were poor (θῆτες), only one need be wedded or portioned (Dem. 1068).

23. ἰψ̄: Used by Hm. in a series, like πρῶτος; π 173, § 435-6; BB.

27. μίαν: This seems added in consequence of the inadequate and clumsy expression of the preceding clause. [A second heiress cannot be married by the same person, if the first one has died. C.]

30. ὁ ἐπιβάλλων ὀνοῖεν: For this technical expression Herodotos (VI, 57), speaking of Sparta, uses ἐς τὸν ἐκτέταται ἔχειν; Pollux (3, 33), ὁ ταύτῃ προσήκων, and Andokides (Myst. 117), of the heiresses, αἱ ἐγγίνοντο εἰς τε ἐμὲ καὶ Λέαγρον: cf. εἴτε κατὰ δόσιν αὐτῷ προσήκεν εἴτε κατὰ γένος, Dem. 1136.

35-50. The minimum marriageable age (ἡβίονσα) for the heiress is 12 (xii, 32), for the groom-elect probably 14 or 15 (ἡβίων), from which time till 17 he was called ἀπόδρομος. During this period he was expected to marry, and if he refused he was deprived of his share of the income of the heiress's estate. But on coming of age (17, δρομέως), if he still refused, while she was willing, he was summoned before the judge (as the archon at Athens, Dem. 1068) by the heiress's relations and ordered to marry her within two months, at the peril of forfeiting all right to her property. From Strabo, 482, it would seem that such early marriages were necessary only in the heiress-relationship; for he says that, after their release from the ἀγέλαι, the young men were required to marry; and this age is calcu-

lated at 27 or 28 (Schoemann, *Ant.* p. 306). An early age, however, is indicated by Strabo for the bride, by his statement that she was not taken to the home of the groom until she was competent to manage a household. The bride of the Athenian Ischomachos was not yet 15 (Xen. Oik. vii, 5; cf. Dem. 814, 857); and from Demosthenes (1009) we have the case of a youth married at 18.

40. *πρεῖν*: Though elsewhere *πρίν*: this is to be compared with *πρεῖ-γος*, *πρεῖγυνα* (xii, 32); cf. Curt. Et. 472.

51. *φυλᾶς*: "The civic body which bore rule in the states of Crete was without doubt, here as elsewhere, split up into tribes and subdivisions of tribes; but on this we have no particular information, except that we find the Dorian tribal name Hylleis mentioned in Cydonia (Hesych.)" (Schoemann, p. 300). To this scanty evidence should be added the word *ἐμφύλοι* (Cauer, 119, 15), which is supplemented by this code (viii, 6, 11, 13, 26, 32). [Halbherr's collection of inscriptions shows other names of tribes; C. on v, 5.]

COLUMN VIII. 7. *ἀποδατῆθαι . . . ἰψ̄*: This supplies the deficiency of the expression *διαλαχόνσαν* preceding.

9. According to Plato's provision (Legg. 925), "If there be a lack of kinsmen in a family extending to grandchildren of a brother, or to the grandchildren of a grandfather's children, the heiress may choose, with the consent of her guardians, any one of the citizens willing to accept her hand." Our code is measurably more generous to the heiress than the Athenian or the Platonian, as indeed the position of women in general is more independent, as it was at Sparta. Plato, while following the ordinary principles of Greek law in relation to heiresses, is yet fully sensible of their oppressiveness and hardship (Legg. 925-6), and acknowledges that there will be cases in which the parties will refuse to obey, and be ready to do anything rather than marry, when there is some bodily or mental malady or defect, especially insanity, in one party or the other. He accordingly provides that such cases may be brought before the guardians of the law or the court for adjudication.

20-29. *νόναται*: I connected this with *νο-σάζω*, in the sense of "consent" (*ἐκούσιον ἐκουσία*, Plat. Legg. 925 A); but the adj. *νονατόν* in C.'s minor inscription seems to demand the sense of "able," as if for *δυνατόν* (*δύναται*). At Athens a daughter without brothers was regarded as an heiress (*ἐπίκληρος*), as well during her father's lifetime as after his decease (Pollux, 3, 33). In the Gortynian code she is not so, till the death of her father, nor then if she have brothers. The text here contemplates her having been married off by her father, or after his death by a brother. In the first case, she would become heiress at her father's decease if she had no brothers, in the second, after the brother's death. In the latter

event, at Athens her previous marriage could be dissolved directly by judicial decision, her hand being demanded in court by the nearest of kin, as was often done (Is. 3, 64; Dem. 863, 867) whether there were children of the marriage or not. The claimant, however, could forego his rights, if he pleased (Is. 10, 5). Here, on the contrary, it appears that the marriage was regarded as dissolved by the very fact of her thus becoming an heiress, and, if children had been born, it rested with herself and husband to remarry, or, if she pleased, she might wed anyone else of the tribe, by surrendering half the property to the husband and children—a provision which again exhibits the humanity of our lawgiver in striking contrast even to Plato.

36–40. Cf. ἀποστισάντων οἱ ἐπιδάμοι τῶν χώρων, Cauer, 119, 33. Sojourn abroad (ἀποδημία) is given in Isaïos (2, 12), as a reason why a brother at home should be selected for adoption in preference to the absentee. Plato would give permission to the heiress to select some one who has gone forth to a colony and bring him back, provided she had no kinsmen (Legg. 925).

42. Plato admits the brother by the same mother among those whom the heiress is to wed, if he has no allotment of land in the community (Legg. 924 E).

45. διαλαγχάνειν; BB. would take the subject from the following clause. In any event the moiety that passes into the hands of the πατρώας goes to the groom-elect (vii, 29–35).

47. ἰάττα: The Dorians of southern Italy used ἔασσα (Ahrens, ii, p. 325). [So C., et om.]. The partic. here represents the temporal clause preceding (cf. Hm. θ 461).

51. According to Diodoros (xii, 15) the Katanian lawgiver Charondas wrote, that the nearest kinsmen of the father should manage the property of orphans, but that they should be brought up with the mother's relatives (cf. Diog. Laert. Solon, ix; and the old Scotch and French law). The historian praises this regulation highly, because the relatives on the mother's side are not heirs to the property and will therefore not plot against the orphans' lives; while the father's kinsmen are unable to do so, since the orphans are not entrusted to their care. On the other hand, the property which may fall to them by the death of the orphans they will manage with the greater care, in the hope that it may ultimately come into their possession. According to the hypothesis of Is. 10, the father's brother was the legal guardian of the children of the deceased at Athens; cf. Is. 1, 9; Dem. 814.

COLUMN IX. 5. Lysias, as cited by Suidas (ἐγγεῖτον), quoted a law at Athens to the effect, that all money belonging to orphans should be vested in mortgages, but in no other security. [C.'s reading is opposed to the

general principle of the code as enunciated vi, 7-23. Whatever may correctly supply the lacunae here, it cannot be that the guardians would be permitted to sell property forbidden to a father. BB. have rightly seen this.]

18. See Plat. Legg. 914 C., and the inscription from Zeleia, Ditt. S. I. G. 113, 18-21: ἤν δέ τις ἀμφισβᾶτῃ φᾶς πριάσθαι ἢ λαβεῖν κυρίως παρὰ τῆς πόλεως, διαδικαστέην αὐτῷ εἶναι, καὶ εἰάν φανῇ μὴ ὀρθῶς ἐκτελέμενος, τὴν τιμὴν αὐτὸν ἐκτίνεν ἡμιολίην.

26. ἐνκοιωτᾶνς (ix, 35; Blass, BB.) relieves this passage of much difficulty. At the best we can do no more than guess at the meaning as a whole. ἐνκοιωτᾶνς is referred to the Hesychian gloss, κοῖτον· ἐνέχυρον, money for which a pledge is given.—διαβαλλόμενος: defraud; Ionic and old Attic. BZ.

32-33. δικαστᾶς: Cf. Dem. Neair. 40: τοῦτων αὐτὸν μάρτυρα ὁμῖν τὸν τότε πολέμαρχον παρέξομαι.—μνάμων: This word, occurring in inscriptions from Halikarnassos, Iasos, etc., is described by Aristotle (Pol. vii, 8), as the title of the officer before whom all private contracts and the decisions of the courts of law have to be registered, indictments laid, and preliminary proceedings in a lawsuit taken.—πολιτεύς may refer to the possibility of his being abroad at the time of the case coming up again (cf. οἱ ἐπιδάμοι τῶν κύσμων, Cauer, 119) [so Blass], or of his having suffered ἀτιμία; or, if a mere scribe, of his being a slave. But it may be doubted if any written records of the court were actually kept; none seem here implied. We are reminded of the Homeric supercargo who was φόρτου μνήμων, θ 163. In the Gortynian inscription, Bull. Cor. Hellén. 1885, p. 19, the μνάμων of the kosmoi is the brother of the eponymous kosmos. The ordinary Greek γραμματεὺς occurs in the Drierian inscription, Cauer, 121.

36. ἀποFείποντι: Cf. xi, 11, and Is. 2, 33: αὐτοὺς παρέξομαι μάρτυρας, ἐὰν ἐθέλωσιν ἀναβαίνειν (εἰσὶ γὰρ τοῦτων οἰκεῖσι); Dem. 850; Is. 9, 18; Aischin. Tim. 71.

40. νικήν: Cf. νίκης, τὴν μιν ἐγὼ νίκησα, Hm. λ 545.

41-43. Is this a penalty, or a restriction? Cf. iv, 29-30.

44. πέραι = περίρ C.; cf. χρέος, χρεῖς, as συμπλεῖξ for συμπλέξῃ (cf. πλίσσεται, plicare).

47. μέττ: μέστα occurs in the Kretan inscription, Cauer, 120, 40, and the Arkadian, 457, 30.—Plato recommends that a transaction in cases of surety, be witnessed by 3 persons if the sum be under 1000 drachmas, five if above (Legg. 953). If contributions to ventures abroad are really meant in this passage, the feature which contemplates the possibility of a single drachma is truly interesting.

COLUMN X. 15-18. Cf. xii, 15.—λείωντ: The emphatic position seems to throw the stress here. The heirs need not pay a legacy above 100 staters, unless they wish. Plato is more peremptory in the case of the gift



of a fixed sum for marriage garments, which, if exceeded, shall be forfeited to Hera and Zeus, and a fine of equal amount exacted, Legg. 774 D.

20-24. In the Delphian inscription, Ditt. S. I. G. 462, it is said of a slave emancipated under certain conditions: *εἰ δὲ τινι ζώων δόσιν ποιέουτο τῶν ἰδίων Σώσος, ἀτελής ἂ ὀνὰ ἔστω.*

25-28. To make *Ἀντρωπων* subject is contrary to the spirit of the language of the code.—*δέξασθαι*: Cf. *εἰ γε μηδὲ δοῦλον ἀπραγῇ δεξαίμεθ' ἄν*, Xen. Mem. i, 5, 3. Second mortgages were not forbidden at Athens (Dem. 930), except by special contract (Dem. 926), nor at Ephesos, Ditt. S. I. G. 344, 34.

33. Adoption at Athens could take place from any citizen's family, though usually confined to relatives, and only when the adoptive father had no legitimate male children (Hypoth. Is. 10), or had renounced those he had, though he might adopt in his will, the act to take effect in the event of his sons dying before they reached their majority, or in the event of his having none at all. If he died childless and intestate, the next of kin became a *quasi* adopted child. After taking the adopted son to his house, on a certain day, regularly that of the *Thargelia* (Is. 7, 15), he brought him before the *phratores*, offered a sacrifice, and swore on the altar that the adopted son was an Attic burgher, and he called his *phratores* to witness that he adopted him as his son. Enrolment then took place in the register of the phratry, as later in that of the deme (Meier and Schoemann, *Att. Proc.* p. 437; Isaios, *passim*). The adopted son succeeded to all rights and responsibilities of legitimate children, the *sacra* (Is. 2, 10, 36-7, 46), payment of debts, etc. If there were natural sons born to the father after adoption, the adopted received an equal share with the son (Is. 6, 63). Were there daughters of the family into which he was adopted, he was expected to marry one of these, and probably adoption could not take place without this provision (Is. 10, 13). If the act took place by will, he might be directed to receive only a part of the estate, as a third or half (cf. *Dikaiogenes*, Is. 5). In this case he was probably compelled to pay at least his share of the father's debts (cf. Dem. Lakr. 4); if not, the custom would be something like that of our code where there are daughters, when the adopted son was at liberty to decline the obligation. According to Greek sentiments, one would hardly expect him to be relieved of the *sacra*, though they were often costly and troublesome. That he could decline these, is not distinctly stated, though it seems implied, in this code (xi, 2-3). As here, so at Athens, no woman or minor could adopt (Is. 10, 10).

The first 15 lines of column xi., though published in 1863, were not properly explained till 1878, by Bréal (*Rev. Arch.* xxxvi). There could



have been no difficulty with it, if the preceding part had come to light at the same time.

36. ἀπαγορεύοντι: ἀπαγορεύει· ἀποφαίνεται, Hesych.

38. ἑταιρεία: Dosiadas (Athen. 143) says that all Kretan citizens were divided into ἑταιρείαι, and these were also called ἀνδρεία, which is the old Dorian word for mess-companies (*syssitia* at Sparta, in the historic period). Each citizen contributed one-tenth of the produce of his land to his *hetaireia*, and this body made over the total amount of all these contributions to the state treasury, or rather to that division of it from which the expenses of the *syssitia* were to be defrayed (Schoemann, p. 307). In the Drerian inscription, fines laid on the *kosmoi* for the non-performance of duty are also to be divided among the *hetaireiai*. Such regulations support the keen-sighted remark of Hoeck (*Kreta*, iii, p. 126), that these *hetaireiai* formed close mess-companies, at the foundation of which probably lay an earlier tribal division and distinction of family (Dass dieser Einrichtung eine frühere uns unbekannt gebliebene Stammeintheilung und ein Geschlechter-Unterschied zum Grunde lag, wird wahrscheinlich). This becomes still clearer from the fact that in matters of adoption the *hetaireia* corresponded to the Athenian *phratia*. The frugal supply of wine, a small pitcher full, points again to an early period, as the victim at Athens was called *μεῖων* (Pollux, 3, 53). It is true that frugality in meats and drinks, especially wine (Plat. Min. 320), was a characteristic of the Kretan people; but at the ordinary meals a bowl of wine was placed on the table, and then a second, after the meal was over (Athen. 143).

42-3. θίνα καὶ ἀνθρώπινα: θείων καὶ ἀνθρωπίνων, Kretan inscription, C. I. G. 2554 (new reading from the stone, θίνων καὶ ἀνθρωπίνων, Comporetti, Museo Italiano, i. p. 144); θείων καὶ ἀνθρωπίνων, Cauer, 118.

COLUMN XI. 5-6. πλῖνι: More than the daughters,—to houses, cattle, etc., as a son would (iv, 31-43). [C. conceives the meaning to be "the adopted son shall not transmit it further by adoption."]

10. So at Athens, Dem. 1100.

11. The Athenian ἀποχήρυξις, admissible at least in case of legitimate sons (Dem. 1006, Plat. Legg. 929; ἀπειπασθαι, Hdt. i. 59). Repudiation of an adopted son was also permitted, even after his marrying a daughter of the adoptive father, as seen in the case of Leokrates, Dem. 1029.

15. I have supplied δέξα as double the gift of ii, 52, where it is the amount presented to the wife when renounced by the husband.—[δῖα στῆριον: probably the building on whose walls the code was inscribed, BZ.]

16. ξενίω: This may correspond to the Homeric ξενίητον, as the gift of hospitality presented to the guest at parting, and would thus be an assurance that the repudiation was done in all friendly feeling (cf. Cauer,

118, 15: δόμεν ἀποῖς ξένια ἀργυρίω μνᾶν); or it may be read ξένιω "in propitiation of Zeus Xenios"; cf. Athen. 143, f. [C., reading τῷ ξαενίω, refers it to a tribunal, ξενικὸν δικαστήριον, Pollux, 8, 62.]

20. ἔγραψε: For ἐγράφθη, by assimilation, C.

21. ἀμφαντοῖ: Dat. of ἀμφαντός, as ὀρχηστός, etc. [So also Blass; and Dittenberger, *Hermes*, 1885, p. 577.]

24. It will be noticed that the remainder of the code is mainly explanatory and supplementary to the preceding, as if it was originally intended to stop here, but additional provisions were found necessary or advisable, as in the Twelve Tables at Rome.

25. ἐπιδέχεσθαι: I understand this as supplying a fact that seems taken for granted in i, 2-25, but is now distinctly enjoined, namely, that the slave, when set at liberty after seizure by the complainant, shall be received by his master, who shall be responsible for him till the decision of the judge; and, in the case of the free man, the *assertor in libertatem* shall do likewise, as implied in ὁ ἔχων, i, 24. "Toute personne qui voudra transiger avant jugement sera toujours reçue à le faire," D.; "L' uomo che voglia (ammettere quanto reclama chi lo cita in giudizio) ammetta in ogni caso prima del processo," C.; "Einen Menschen, wer ihn weggeführt vor dem Rechtsstreit, nehme man immer an sich," BZ.

45-53. Notwithstanding the expression γυνὰ ἀνδρός (which, however, is to be compared with iii, 41), this appears a mere supplement to iii, 5-7, where the husband has brought suit against the wife for recovery of property claimed to have been wrongfully taken. If the judge decide that she may take her oath of exculpation, it shall be done within twenty days, but 4 days previously the complainant shall announce his charges. [So BZ., Blass; C. and D. of the woman suing for divorce from husband, of which we know so little at Athens.]

53. προτέταρτον: This seems preferable to F.'s πρὸ τετάρτων, although singular. [So C., *et om.*] Cf. προσκαλεσάμενος πρόπεμπτα, Dem. 1076, 75; πρότριτα, Thuk. ii, 34, Arist. Pol. vii, 8, 7 (1321). If πρὸ be retained as a separate preposition, its usage in this sense at so early a date finds support from Hdt. vii, 130, 138; cf. Cauer, 119, 42.

COLUMN XII. 16. ἔγραπτο: Clear evidence that a written code preceded the present one, as that of Draco before Solon's; and like Draco's it was in great part superseded by the one we now have, in matters of private relations.

21. ὀρφανοδικασταί: One would naturally expect this word to be equivalent to the ὀφφανισταί of Photios: ἀρχὴ ἐπὶ τῶν ὀφφανικῶν· ἵνα μηδὲν ἀδικῶνται: or Xenophon's ὀρφανοφύλακες (Vectig. 2, 7), or the Archon Eponymos at Athens (Dem. 1076). But what kind of a public office could be that in which an interregnum during an heiress's minority would

be conceived to exist? It seems to me more likely that these are guardians appointed by the father before his death. Plato (Legg. 924 B) prescribes that, if a father die intestate, the next of kin, two on the father's and two on the mother's side, and one of the friends of the deceased, shall have the authority of guardians (cf. 766 C). Or it may mean the grandfather, who might be alive during the youth of the heiress. [Not public officials; probably appointed by father, C.]

27. *πάτρωα*: According to the requirements of the case, this cannot mean the father's brother, as elsewhere, but must be some more distant relation on the father's side (cf. *μάτρωα* in Pindar and Eur.). [Grandfather, C.]

28. *τὸν ἐγγραμμένον* should refer to viii, 44-52, ix, 1-4.

30. *ἀνᾶται*: *ἀνη· ἄνυσις*, Hesych.; hence *ἀνάω· ἄνυσις· ἀΐξεις*, Hesych. *τὸ τοίνυν χωρίον τὸ ἐκείνου πατρῶον ὁ πατήρ ὁ ἐμὸς* (as guardian) *ἐφύτεγσε καὶ ἐγζώργει καὶ ἐποιεῖ διπλάσιον ἄξιον*, Is. 9, 28.

AUGUSTUS C. MERRIAM.

## NOTES ON ORIENTAL ANTIQUITIES.

### TWO BABYLONIAN SEAL-CYLINDERS.

The two seals, of which the accompanying figures (10 and 11) are copies, are of a type extremely rare, if we may judge from the fact that it is not, so far as I am aware, represented among the hundreds



FIG. 10.

of seal-cylinders found in Cullimore's, Lajard's, Ménant's, and other collections and publications. Both are engraved somewhat less than



FIG. 11.

the natural size.<sup>1</sup> The larger of the two (fig. 10) belongs to Dr. A. Blau, a merchant in Mesopotamia, who was good enough to allow

<sup>1</sup>The height of fig. 10 is  $1\frac{1}{4}$  in., that of fig. 11 is  $1\frac{1}{2}$  in.

me to take a wax impression of it, with the privilege of publication. It is of black marble, and in a state of perfect preservation.

The other (fig. 11) I have never seen, but I obtained ink impressions of it on paper, done in the oriental style by a dealer in antiquities in Baghdad, in whose possession it once was. These impressions give an imperfect idea of the condition of the seal, but I judge it to be well preserved, and presume it also is of black marble.

A single fine cylinder figured (enlarged) in Lajard's *Culte de Mithra*, pl. XII. 5 (fig. 12), may throw light upon these cylinders. The material and ownership is given as unknown to M. Lajard, who received a copy of it from Constantinople. The composition is entirely different: the subject belongs wholly to common life; the figures are arranged in an upper and a lower register, and we miss



FIG. 12.

the remarkable figure of the man astride of the bird. On the other hand, the free composition, and the sheep and goats headed by the human figures, are sufficient to show that the three belong to the same period and school of art. Indeed, the gate in fig. 12, so well drawn, out of which the sheep are driven, is probably represented in fig. 10 by the gridiron-shaped object to which the flock is being led.

The correspondence between the first two cylinders is very marked. Observe that the group formed by the man astride the bird, and the dogs under him, is precisely the same in both. In each a kneeling man holds a tablet. In one a seated man, and in the other two seated men are before a vase. In each, a man is driving a flock of sheep led by a goat. In each, a man stands with uplifted right hand, holding an object in his left hand. The bird in the tree, the

lions, one kneeling figure, and the common Babylonian seven stars are peculiar to the larger cylinder. The two were possibly made by the same artist.

Babylonian literature and art, so far as I can recall, give no explanation of the bird bearing the man. The Zu Bird, described in Smith's *Chaldean Genesis*, seems to have no relation to it. It reminds me rather of Ganymede and the eagle, or of the mighty roc of Arabic fable, which may very possibly have been inherited from such a Babylonian original as is figured here. The bird with outspread wings, but unmounted, occurs, especially with goats, in a number of curious cylinders.

The very freedom of the design suggests an early and not a late period. The art of the early Chaldean period of the discoveries of Telloh, and of King Gudea, was much less conventional than that of a later period. This indication is supported by the inscription on fig. 12, which is in the most archaic Babylonian style. Niffer, from which the first cylinder is said to have come, is one of the very oldest sites in Babylonia. Black marble is a favorite material of the older cylinders, and the shape and large size are further indications of great antiquity. I am inclined to believe that the three cylinders belong to Southern Babylonia, and to a period from two to three thousand years before Christ.

WILLIAM HAYES WARD.

UNPUBLISHED OR IMPERFECTLY PUBLISHED  
HITTITE MONUMENTS.

I.

THE FAÇADE AT EFLATÛN-BUNAR.

[Plate I.]

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In an article published in the *Revue Archéologique* for May 1885, M. Perrot gives a drawing of the remarkable monument of Eflatûn-Bunar, with an account of it by Dr. M. Sokolowski of Cracow, who visited it while on a scientific expedition to explore ancient Pamphylia. M. Perrot, in a foot-note, states that he has seen, in a report of a trip in Asia Minor made by Dr. Sterrett and Mr. Haynes, that they took a photograph of this monument, and he asks that a copy of the photograph may be sent to him. As Mr. Haynes, now of the Central Turkey College at Aintab, who went with Dr. Sterrett on his trip for the purpose of taking photographs, has placed in my hands, for such use as I might make of them, copies of his photographs of this remarkable monument, it seems best that a fully trustworthy representation of it should be published.

The monument was long ago imperfectly known by the description of Hamilton, who, in his *Researches in Asia Minor*, pp. 351, 352, gave an unsatisfactory account of it, saying that he knew nothing like it in Asia Minor. Its location is given by Hamilton and Sokolowski with sufficient exactness, as on the edge of a small sheet of water at the head of a stream flowing into Lake Bei-sheyer, and about nine miles north of that lake. It lies about fifty miles a little north of west of Konieh, the ancient Ikonion. It consists of a façade of fourteen stones of reddish brown trachyte, and faces almost exactly south. Its size is given by Hamilton as 22 feet 5 inches long, by 11 feet high, and 2 feet 6 inches in thickness. It appears to have been the front of a structure the rear of which, now torn away, once rested against the neighboring cliff.



There can be no question that this monument belongs to that primitive period in the history of Asia Minor which we are now coming to call "Hittite," although its construction, as seen in the plate, is quite different from any other known monument. For making out the details, the plate should be compared with the drawing of Dr. Sokolowski, who says that it is so worn that, in order to make out the position of the figures, it must be seen from different points of view.

It will be seen that an immense winged circle, here a half-circle, typical of the supreme deity, and cut in a single block, spreads its general protection over all the figures represented. The wings are very long, and show the wing-coverts separate, and are turned up at the ends. Beneath the central part of this winged circle, on a single stone, are two other smaller circles, the wings of which meet. The circle is complete, the wing-coverts do not appear, and the short wings turn up strongly at their ends. Beneath the centre of each of the two minor winged circles is a colossal human or divine figure, the left one of which wears a long pointed cap, and lifts the arms straight up on each side of the cap. Ten smaller human figures are seen, symmetrically arranged and holding up their two arms, as if, like Atlas, supporting a universe. Two of these, the upper one on each side, have one leg advanced and uncovered, and wear square caps, a girdle and sword.

The winged circles, representing the protection of the supreme deity, are common to Egypt, Babylonia, Assyria, Persia, Phœnicia, and the so-called Hittite race of Asia Minor, though foreign to Greek art. The wings, slightly upturned at the point, are characteristically Hittite, as seen in the remarkable sculptures of Boghaz-keui, where the emblem occurs several times. The high, peaked cap of the left of the two colossi is also in a common Hittite style, as seen in forty of the Boghaz-keui sculptures, in the two figures called pseudo-Sesostris, at the Karabel Pass, and in an unpublished relief at Jerablus (Carchemish), representing two men standing on a crouching lion. Square or round head-dresses, such as are worn by the other figures, are common on Hittite monuments, but are less characteristic. The condition of this stone does not allow us to decide whether the toes are turned up, as is so frequent in Hittite figures.

The most remarkable thing about this monument, and one to which I know of no parallel, is the presence of three winged circles, as if there were three supreme gods. If we may judge from the universal use of this symbol, three gods cannot be intended, although one's first thought naturally is of a supreme triad, like the Assyrian Assur, Hea, and Bel. We may, perhaps, conjecture with more plausibility, that this monument, built, like the Assyrian effigies of their kings, at the sacred head-waters of lake and river, celebrates not the victory of one king, but the alliance, perhaps after war, of two kings. These would appear in the two colossi, which are differently attired, whose size indicates them to be the principal figures, and each of whom is appropriately placed under the supreme divine protection. They are accompanied by attendants, and they all lift up their hands in adoration, as they are all once more represented as together under the protection of this same supreme power, this time figured as a still larger disk with longer stretch of wings.

It is not unexampled, to find three or more winged disks, near together, in Persian sculptures, where, however, they have been reduced almost to the condition of a decorative motive.

The number of places in Asia Minor where Hittite remains have been found is rapidly increasing. This, at Eflatûn-Bunar, would seem to belong to a highway from Carchemish towards Smyrna, by way of the great Hittite centre about Marash and Aintab, through Tarsos and Ibreez. These remains appear to be especially abundant about Kappadokia and Lykaonia. Another monument, not far off, somewhat less important than ours, but yet interesting, found by Dr. Sterrett on his expedition of last summer, awaits publication. A number of others from Marash, Carchemish, etc., not yet published, I hope to give in future numbers of this Journal, as part of the fruit of the Wolfe Expedition to Babylonia.

WILLIAM HAYES WARD.

## NOTES.

### NOTE ON PLATE V, 2, OF VOLUME I.

On p. 153 sqq. of the preceding volume of the JOURNAL, Dr. Alfred Emerson has quite correctly brought out the fact, that the relief of Herakles drawing the bow, published by Rayet in his *Monuments de l'Art Antique* (reproduced in pl. v, 2), and attributed by him to the end of the VI or the beginning of the V century, does not correspond in the least with the pure style of archaic Greek art. The conclusion, however, which Dr. Emerson draws from his observations, that the relief is a modern forgery, seems to me hardly justified. It is certainly not archaic, but it is archaistic; that is, it belongs to that class of reliefs of a late period which imitate in a very refined but exaggerated manner certain peculiarities of the archaic style, introducing, however, some practices of the later and freer style.

I have not seen the original of the bas-relief, but I am well acquainted with another which is its exact counterpart, and about which there cannot be the least doubt. It represents Herakles with his knee on the stag's neck. The style of the two reliefs is absolutely identical: even the type of the beardless hero is the same in each, and is, in fact, strongly related to that of the Harmodios (in Naples). It is quite probable that both reliefs are derived from statuary groups of the series of Kritios and Nesiotes. The relief with the stag was sold at Rome in 1884, at the auction of the collection of Alessandro Castellani (No. 1093 of Fröhner's catalogue), and is now in a private collection in Rome: a cast of it is owned by the Berlin Museum. It is 33 centim. high; and Rayet gives the height of the relief published by him as "environ" 35 centim.; so that they are of the same height: the width is different, on account of the subject, as the fallen stag required far greater width than the standing archer. Both reliefs must have belonged to one and the same series of representations of the labors of Herakles. Of course, the relief of Herakles as archer must have been immediately followed by a slab representing his adversary. Both these works should be ranked among the very best examples of archaistic art, and may belong to the first century B. C.

A. FURTWÄNGLER.

BERLIN.

## RECENT ARCHÆOLOGICAL DISCOVERIES IN PERSIA.

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### I.

The attention of archæologists has recently been drawn to the antiquities and monuments of Persia, through the researches and discoveries of M. Dieulafoy, charged by the French government with a mission to the East. For about three centuries numerous travellers have visited Persia and have signalized the important ruins which cover the southern provinces of the country; but no one, until now, had studied and classified scientifically the ancient monuments of Iran, or carried on methodical excavations on sites that promised to yield interesting discoveries.

This is hardly the moment to recall the principal travellers who have been attracted by the archæological riches of Persia. As early as the close of the XVI century, the Bolognese architect Sebastiano Serlio, on the strength of reports of Catholic missionaries, thought himself able to make a tentative restoration of the palaces of Persepolis. A little later, Don Garcias de Sylva de Figueroa (1574-1628), ambassador of Philip III to the Shah Abbas the Great, visited the ruins of Persepolis, in describing which he dwelt particularly on the cuneiform inscriptions. In 1602, Stephen Kakasch, ambassador of the Emp. Rudolph II, wrote a description of Persia, the text of which has quite recently been published by M. Schefer, under the title *Iter persicum* (Paris, Leroux, 1877). In 1621, a Roman, Pietro della Valle, brought back from Persepolis to Father Kircher the copy of a fragmentary cuneiform inscription: probably the first cuneiform letters seen in Europe. About thirty years later, Thévenot visited Persia and described it; but none of these travellers had the critical sense of Chardin (1681), or showed as much care in the description of the ruins. After him may be hastily enumerated: Struys in 1681; Flower in 1693; Hyde in 1700; Cornelius Van Bruyn in 1704; Tavernier in 1712; Kœmpfer in 1712; Otter in 1748; Niebuhr in 1765; and, at the end of the last or the beginning of this century, Ouseley; abbé de Beauchamp; Jaubert; Dupré (1808); more recently, Ker-Porter in 1818; Tessier in 1840; Coste and Flandin in 1841; W. Loftus in 1852; and finally the Comte de Gobineau.

In 1874 the German government sent to Persia an epigraphic and archaeological expedition under the direction of Dr. Andreas, of Kiel, and Dr. F. Stolze. The scientific results of the German mission are, as yet, only very incompletely known. Still, the fifth international Congress of Orientalists, held at Berlin, decided that the archaeological photographs taken by Messrs. Andreas and Stolze should be published. The first volume of the extensive publication appeared in 1882<sup>1</sup>: it must be confessed that it is a real deception as well for archaeologists as for Orientalists. The photographs are defective, and were evidently taken by persons with very little care for archaeology. But little account is to be taken of this album, as costly as it is useless.

A peculiar contrast is the book which M. Dieulafoy has devoted to the ancient art of Persia, where the author codifies the results of his observations in the province of Fars, along the Persian Gulf.<sup>2</sup> In Farsistan are grouped the most important monuments of the ancient civilizations that flourished in Persia: there lie overthrown the palaces of Persepolis, of Murghâb, of Shiraz, of Shahpûr, of Darabgerd, of Naksh-i-Rustam, and of Firuzabad. Travellers have many times described these ruins, but what was still necessary was to ascertain their exact age, their architectural characteristics; to clearly disengage what, in these monuments, belongs to each one of the dynasties that succeeded each other in the country. M. Dieulafoy starts with the valley of Polvar-Rûd, the ancient Medos, where, in the neighborhood of Meshed-Murghâb and Mader-i-Suleiman, villages on the road from Ispahan to Shiraz, are the remains of a city built by the first Akhæmenid dynasty, anterior to Darius I. It was after his victory over Astyages that the great Cyrus built the palace of Meshed-Murghâb and the sepulchral monuments, such as the tomb of his father Cambyses I and the Gabr-i-Mader-i-Suleiman, "the tomb of the mother of Solomon," in the valley of Polvar, situated on the borders of Persia proper and recently subdued Media. The city of Cyrus was abandoned when Darius founded Persepolis, a little further on, in the plain of the Merdash. The ruins of the Polvar valley represent, then, the most ancient period of Persian art, and the first questions that arise are: Where did this art come from? In what was it original?

<sup>1</sup>*Persepolis. Die achæmenidischen und sassanidischen Denkmäler und Inschriften von Persepolis, Istakhr, Pasargadae, Shahpur, zum ersten male photographisch aufgenommen, von F. Stolze, in Anschluss an die epigraphisch-archæologische Expedition in Persien von F. C. Andreas. Herausgegeben auf veranlassung des fünften internationalen orientalistischen Congresses zu Berlin, mit einer Besprechung der Inschriften von Th. Nöldeke. Erster Band, Berlin, Asher, 1882, in f°.*

<sup>2</sup>*L'Art antique de la Perse. Achéménides, Parthes, Sassanides, par Marcel Dieulafoy. Paris, Des Fossez, 1884. Four out of five parts have already appeared.*

What did it borrow from other civilizations, and what are these civilizations?

Whatever originality is shown by Persian art under Cyrus is conditioned by the peculiarities of soil and climate under which it was produced and developed. There is no water in Persia, and this explains the scarcity of trees and, consequently, the lack of wood for building purposes. In the mountainous districts an intense cold prevails, and in the plain a tropical heat unequalled, perhaps, in the world. The natives were therefore constrained to build dwellings suited to protect them from both extremes: they succeeded in doing so without the use of wood, by means of vaults and terraces. "These special conditions of soil and climate," says M. Dieulafoy, "gave rise to a special architecture, and as it prevented the development of any foreign importation which was not adapted to local requirements, exaggerated in Persia that law of immutability which seems to have been imposed by destiny on all the nations of the East." Now, the geological and climatic conditions of Persia led the inhabitants to construct their dwellings on artificial terraces, and to cover them with brick vaults and cupolas. It was the Iranians who invented the cupola with pendentives and the vaulted naves, long before the architects of Byzantium or the West. Their constructions, doubtless, are quite rude, but contain all the principles which it was sufficient to develop in order to attain to the marvellous cupolas of Santa Sophia.

The terrace, the vault and the cupola are, then, at all periods and through all revolutions the essentially original and invariable characteristics of the popular architecture of Persia, as opposed to the official architecture, with its imported foreign elements. But, as early as the time of the first Akhæmenid dynasty, there exist in Persia artistic or architectural elements that are not prescribed by the natural conditions of the country, and are consequently of foreign origin. An analysis of the monuments of Meshed-Murghâb discloses the fact that they bear the closest affinity to Greek monuments, especially to those on the coast of Asia Minor. Some, like the Takht, the Gabr, the ruined palace, resemble Greek constructions; others, like the sepulchral towers, recall Lykian constructions. No sign of the influence of Egypt and Assyria; not a profile, not a detail of the mouldings, not the least ornament the prototype of which can be found on the banks of the Euphrates or the Nile. Even the idea of building on an artificial platform belongs as much to Lykia and Asia Minor, as it does to Elam or Chaldæa.

But are the monuments of Meshed-Murghâb the prototypes of the Greco-Lykian edifices, or did the Akhæmenids borrow their architecture from the inhabitants of the coast of Asia Minor? It is easy to prove, historically, that the Akhæmenids were the imitators. Before the reign



of Cyrus, the Persians had never had direct and continued relations with the Greeks, from whom they were separated by the Assyrian Empire; the processes and laws of Greek architecture could have reached the valley of the Polvar only by a slow and gradual propagation through Asia Minor and the Assyrian Empire. In this case, we should necessarily find in Assyria monuments similar in their art to the Greek and Akhæmenid constructions. Nothing of the sort has been found: we must then conclude, with M. Dieulafoy, that "the nation that owed to the other its processes of construction, borrowed them only on the day when the Aryans of the South and the Hellenes met for the first time on the battle-fields of Lydia."

Long before the capture of Sardis by Cyrus, we find in Greek monuments, such as the temples of Egesta and Selinous in Sicily, and of Samos, the essential elements of the architecture of the palaces of Meshed-Murghâb; a certain proof that the Persians learned from the Ionian Greeks the secret of their art: the towers of Meshed-Murghâb and of Naksh-i-Rustam show the strongest analogies with the tombs of Myra, of Antiphellos, and with the tomb of the Harpies, at Xanthos in Lykia.

The constructions of the Polvar-Rûd valley are anterior to the expedition of Cambyzes to Egypt, for they bear no traces of Egyptian influence. The trilingual inscriptions in Persian, Median and Assyrian, found there, prove, on the other hand, that the language of Nineveh had already obtained an official position at the court of the king of Persia at the time of the construction of the palace at Meshed-Murghâb; it follows, that these buildings are posterior to the taking of Babylon by Cyrus, and the king who built them was in reality the Great Cyrus, and not Cyrus the younger as some had supposed. At the same time a confirmation is given to the genealogy of the Akhæmenids, who reigned in two branches over Persia, the branch of Cyrus, and that of Darius. The archaeological studies of M. Dieulafoy are, then, useful for history, as well as for archaeology. I will not speak of the question of the geographical identification and the establishing of the sites of the two Pasargadae, a subject of considerable importance but rather beyond my scope.

Persepolis, on the other hand, belongs entirely to the second Akhæmenid dynasty, that of Darius. The latter prince transported the capital of the Empire from Murghâb, in the Merdash plain, to the south of the gorges of Polvar-Rûd; and the ruins of the palaces and tombs raised by his dynasty have given fame to the modern localities of Takt-i-Jemshid, Istakhr, Naksh-i-Radjeb, Hadj-Abad, Naksh-i-Rustam. The Persepolitan palaces are built of brick, with the exception of the columns, doors, windows and staircases; there still remain standing cannellated columns about twenty metres high: the great throne-hall (*apadana*) of the palace



of Xerxes had a hundred columns; the walls were covered with revetments of differently-colored enamelled bricks and decorated with bas-reliefs. "Persepolitan architecture differs from that of Meshed-Murghâb only in the addition of Egyptian motifs, transferred to stone by a school of sculptors imbued with the best Greek traditions." It is certain that Egyptian influence was introduced into Persepolis in consequence of the conquest of Egypt by the Persians. Though in the construction of the palaces it is met with only in details, it produces, on the other hand, a radical revolution in the sepulchral architecture, which experienced an abrupt change between the first and second Akhæmenid dynasties. Under Cyrus and his successors it takes the form of isolated square tombs like those of Lykia; after Darius, the kings excavated *hypogæa* in the face of the rocks, like those of the Pharaohs. We will not follow M. Dieulafoy in his attempt to define what might be called the *Persepolitan order*—the Greek volute surmounted by the bicephalic Egyptian capital—or in his study on the origin of the Greek orders, to which he brings a contingent of new elements and ingenious views.

The fifth part of M. Dieulafoy's important work is still to be published, and will include the Parthian and Sassanid monuments and sculptures, and the origin of Mussulman art. The author will doubtless show that the Arabs borrowed all the elements of their architecture from the monumental art of Iran under the Akhæmenids and Sassanids. In the mean time, we will follow M. Dieulafoy in another field, and speak of the results of the excavations which he has undertaken for the French government in the ruins of Susa, the ancient capital of Elam.

## II.

In 1851 General Williams and Sir William K. Loftus visited the ruins of Susa, and commenced excavations which were interrupted after a few days by the hostility of the inhabitants. Loftus has given an account of his journey and its scientific results in his interesting volume, *Travels and researches in Chaldæa and Susiana* (London, 1857, in 8vo.). Since then, although the mounds have been visited by different travellers, no excavations have been attempted: they are made difficult both on account of the extreme heat and the fanaticism of the Shiis, who hold in great veneration the neighboring so-called *Tomb of Daniel*.

M. Dieulafoy solicited and obtained from the French government the mission of resuming and carrying out the work only sketched out by the English travellers. We trust that fanaticism will not prevent him and his brave companions from prosecuting the perilous enterprise which he has begun with success. Susa is, with Nineveh and Babylon, one of the

most ancient cities of the world, and the study of the monuments that must be found among its ruins cannot fail to throw quite a new light on the origin of the ancient civilizations of the East. After a successful campaign, during last winter, M. Dieulafoy has made known the first results of his mission in a summary report,<sup>3</sup> from which is taken the greater part of the following details.

The citadel and palaces of Susa form to-day a rhomboid tumulus of about one hundred square hectares (= 200 acres). One of the numerous mounds, which together form this tumulus, represents an Akhæmenid monument, the palace of Artaxerxes. In the trench opened on this site there were found all the fragments of a bicephalic capital of colossal dimensions, which, when erected in the galleries of the Louvre, will be the only example of Persepolitan architecture, adequate and exceptionally beautiful, that exists in a European museum.

The special object, in this first campaign, was to reconnoitre the ground, sink shafts in the ruins, and lay bare the walls that determine the arrangement of the palaces and fortifications. This preliminary work has already brought to light a large number of objects in ivory, bronze, alabaster and terracotta. Of especial interest are eighty-eight Elamite seals in *pietra-dura*. "The most beautiful of these intagli is a conical seal of a grayish violet opal. It is of rare beauty, and was doubtless engraved for an Akhæmenid king, Xerxes or Artaxerxes I. . . . The medallion of the king, surmounted by the supreme divinity Ahura-Mazda, is placed between two sphinxes wearing the white crown of Upper-Egypt."

From one of the trenches came an enormous quantity of enamelled bricks, or rather squares of enamelled concrete, from the revetment of a palace wall. On being joined together they were found to form a superb lion in bas-relief, 1.75 met. high, placed between two flowered friezes, on one of which was painted a cuneiform inscription of Darius. Other fragments of the same nature showed that there was originally a procession of nine lions in bas-relief set off by lively and decided colors, which formed the external decoration of an Akhæmenid portico.

In the fortifications of the Elamite gate, that is to say in constructions dating from the earliest civilization that had its centre in Susa, there was found a fragment of a panel of enamelled bricks possessing the greatest historical interest. "These bricks belonged to a panel on which was represented a figure richly dressed in a green robe, overlaid with yellow, blue, and white embroidery, and in a tiger's skin; and carrying a golden cane or lance. The most singular point is that the figure, of which

<sup>3</sup>*Revue Archéologique*, July-August, 1885.

I have found the lower part of the face, the beard, neck and hand, is black. The lip is thin, the beard abundant, and the embroideries of the garments, most archaic in character, seem to be the work of Babylonian workmen." Other enamelled bricks have been found: "two feet with gilt shoes; a well-drawn hand, with a wrist covered with bracelets and fingers that grasp the long bâton which became under the Akhæmenids the emblem of supreme power; another piece of a robe emblazoned with the arms of Susa, partly hidden under a tiger's skin; finally, a flowered frieze with a brownish background. The head and feet were black, and it was even apparent that the entire decoration had been planned so as to accord with the dark tone of the figure."

M. Dieulafoy even recognizes in the physiognomy of this black king of Susa, for it is unmistakably a king, the characteristics of the Ethiopian race. Now this discovery is of capital importance: it connects itself with a tradition preserved among the Greeks and even the Romans, and to which modern criticism has always refused to accord the least historical value. In the *Odyssey* we find, twice cited, a person by the name of Memnon, called "the Son of the Dawn" and "the handsomest of warriors." He is given as the son of Tithonos, the brother of Priam, and he comes from the East with Sarpedon to the assistance of Troy besieged by the Greeks. Hesiod calls Memnon "king of the Ethiopians," that is, king of the men with dark faces.<sup>4</sup>

Besides, we know positively that for the Greeks there were two Ethiopias, one in Asia, beyond the Tigris, that is to say in Elam itself; the other in Africa, at the sources of the Nile. It is hardly necessary to recall the poems of Pindar and Simonides, that sing the fabulous exploits of the black king Memnon, the hero of Asiatic Ethiopia. We will only remark, borrowing the expression of Letronne, that "the kingdom of Memnon was placed in Susiana where his father Tithonos had built Susa; which accords with the tradition followed by Aiskylos, as, according to this poet, Kissia, the country of which Susa was the capital, was thus named from Kissia, the mother of Memnon. According to another tradition, Tithonos was but a satrap of Persia, subject to the king of Assyria Teutamos, who held Troy under his sovereignty. This satrap sent his son Memnon at the head of a hundred thousand Ethiopians, as many Susianians, and ten thousand chariots, to assist Priam, who was his tributary."

In Ovid, the adjective *memnonius* is synonymous with *black*, and classical tradition, represented by Aiskylos and Ktesias, attributes to Memnon the construction of superb palaces. The excavations of M. Dieulafoy at

<sup>4</sup>See Letronne, *Œuvres choisies*, publiées par E. Fagnan, t. II. p. 60 sqq.

Susa will, it seems, prove that these Greek and Roman fables have a serious historical foundation: an Ethiopian race, perhaps connected with the Trojans, ruled at Susa; and Memnon the Ethiopian is not simply a puerile conception of the Greek fancy. It will soon be scientifically established that this hero, like Nimrod, personifies a race, and that he must figure, on this account, in the first chapter of the history of ancient Oriental civilizations.

ERNEST BABELON.

## CORRESPONDENCE.

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### EXCAVATIONS UPON THE AKROPOLIS AT ATHENS.

The excavations undertaken upon the Akropolis, toward the end of the year just closed, were begun near the Propylaia, and were carried along the massive poros-stone foundations of a long and narrow ancient building, extending against the outside wall of the Akropolis, already discovered by the French in 1879-80, but not fully exposed until now: the building probably belongs to the epoch of Perikles but its identity has not yet been established. The excavations have been carried to within fifteen paces of the Erechtheion, and have stopped at a cross-wall running at a right angle with that of the Akropolis. Among a large number of objects found, many being of great value, the following are the more important, and I have arranged them under the categories of bronzes, marbles, pottery, and inscriptions.

I. **BRONZES:** These, though numerous, are mostly formless scraps, but there are some animals, as lions, horses, etc.; a few winged human figures, with legs spread apart, in rapid flight; and two or three female figures: all of the most rude and primitive workmanship.

II. **MARBLES, ALL ARCHAIC:**—1. *Small bas-relief of a horse*, badly broken; head, legs and hind parts wanting; finely modelled, veins and muscles carefully executed; mane represented almost entirely with colors. —2. *Female fore-arm*, without hand. This fragment of an archaic female statue is one of the most interesting of the pieces found. About the wrist is clasped a round bracelet, and above this hangs a piece of himation, richly painted. This painting is preserved with remarkable distinctness: about the edge is a dark-brown, almost black, stripe, and the border so formed is cut, also with dark hues, into small quadrangular fields, about an inch and a half on each side; each of these fields has a red square within it, inside this square a circle of dark spots, inside this circle another dark square, and in the centre a very small red circle. The folds, falling in the characteristic rhythm of the labored archaic style, have a bright border of stripes: red, green, white and this dark-brown color, the brilliant red predominating.—3. *Female torso*, about 2½ feet high. The head was made of a separate piece and is lost. The dress

consists of a soft woollen chiton, buttoned together at the shoulder into short sleeves, and over this a carefully executed himation: the left hand holds the dress at the thigh in the archaic manner.—4. *Female statue*. The body of this statue, though somewhat larger, is an exact repetition of the one just described; probably they are from the same hand, and were set up side by side as parts of one and the same votive offering. The head, which was broken off when found, is adorned with a στεφάνη, back of which the hair was not indicated plastically, but painted upon the smoothly chiselled surface. In front of the *stephane* the hair falls in waves ending in a single row of cork-screw curls about the forehead. In the *stephane* itself are fastened ornamental ringlets of bronze. In the top of the head is an upright bar of bronze for the support of the umbrella-like disk, often copied in vase-paintings. The back-hair covers the neck and falls, in four long curls on either side, about the shoulders. The face bears a striking resemblance to the Athena of Aigina; the chin is exceptionally pointed; and the almond eyes and the archaic smile are prominent features. The epidermis is well preserved in its original smoothness, and it is, on the whole, a rather fine specimen of archaic sculpture.—5. *Equestrian statue*. Probably the most ancient work of its kind, but unfortunately much broken. Almost the whole of both legs, the head, and the arms are wanting. Of the horse the head and neck, the rump and many small pieces have been found. The statue is of a youth or, more exactly, a μελλέφυβος. It does not show all the stiffness of the earlier archaic sculptures, but evidently belongs to a time when they had begun to introduce a little softness and ease, though in this respect our statue is still much inferior to the so-called Strangford Apollon. This feeble attempt at softness of form is seen most plainly in the slight furrow marking the outlines of the stomach, instead of the usual harsh angles. The horse, as we always find animals at this time, is much better executed than the rider.—6. *Draped female statue of the Spes-type*. A large, well-preserved statue of the strictly archaic type. Only the feet and fore-arms are wanting; the nose is slightly injured. The hair is adorned with a στεφάνη and is arranged in unbroken waves about the forehead, combed back behind the ears, and falls in long curls about the shoulders. She wears three garments: over a fine woollen chiton, visible only at the breast, is thrown the himation, fastened lightly at the right shoulder and passed under the left arm; it reaches to her feet and is held in the left hand at the thigh; and over this is a short shawl-like mantle. The painting is well preserved. The chiton was red, the girdle green, and the border of the himation had stripes of green with somewhat indistinct decorations of red. The border of the chiton is a row of green spots with a red and green stripe on either side. The

folds which fall from the right arm, and those from the girdle to the left hand, are painted in a meander of green and red. Besides this the whole dress is dotted with bright-green crosses.—7. *Small female statue.* Arms and feet are wanting. The features are quite beautiful, and the whole makes a pleasing impression. The hair is arranged just as in the preceding, but is much finer and more beautiful. The drapery is arranged upon the left side, but otherwise is like the preceding. No traces of painting remain.—8. *Small female statue.* Almost all of both arms and the feet are wanting. The workmanship is rough and primitive. The hair runs in three separate rows quite around the forehead, and back of these is laid in furrows toward the neck, falling in three curls on either side about the shoulders. Around the neck are only two creases to mark the chiton; there are no folds at all in the mantle above the breasts, and below this is an himation almost devoid of folds, held at the thigh in the right hand.—9. *Male torso.* The execution is hasty. The figure wears a mantle, painted red, covered, except on the right breast, by a long garment thrown over the left shoulder. The collar was painted with a meander of green and red. Only a small part of the chiton is visible, at the right arm.—10. *Marble copy of a ξάνον.* Only the lower half has been found. Deep folds at the sides, and the ends of the girdle falling from the waist, divide the front into three parts; in the middle field are traces of a red stripe, in the outer fields vertical stripes of green. The right hand rested upon the side, and from the point of contact another slight fold runs to the bottom. The himation extends almost to the feet. About its border is a red stripe an inch in breadth, with green decorations, and above this is a red meander. Just as represented in vase-paintings, this has no feet but a sort of basis not more than an inch thick, marked off by a deep groove.—11. *Fragment of a statue of Nike.* This is by far the finest piece among the recent discoveries, but, unfortunately, it consists of only the neck and the right half of the upper part. The hair, though still conventional, is more natural, and the folds in the drapery are arranged in excellent taste. The chiton was painted red, with a blue collar; on the mantle are scanty remains of red and green. Back of the shoulders are large holes for fitting on marble wings.—12. *Colossal female statue.* Both arms and the lower half are wanting. The head is adorned with a στέφανος, behind which the surface is smooth and was probably painted. About the forehead the hair is arranged in three parallel rows of cork-screw curls. The eyes are the exceptional part: they consist of gems inserted in sockets (the right one is broken out), but what the stones are can not be determined with certainty until the statue is well cleaned. It is very beautiful, and the treatment of the rich drapery marks it as a work of the



ripe archaic period.—13. *Female statue.* Arms and legs are wanting. This statue is much more ancient than the one just described, and the proportions much less correct. This head, too, is decorated with a σιγῶν, and the hair was painted red. There are circular concave cavities for the eyeballs; and on close examination we find a small hole in each corner of the right eye, probably made for fastening the inserted eyeball.—14. *Female statue of Parian marble.* This fragment includes only the part from the neck to the waist. It seems to be an almost exact repetition of the so-called Hera of Samos, now in Paris. The dress appears to be only an himation thrown shawl-like about the shoulders and buttoned several times at the right arm. The left hand, which though broken off has been found, rested upon the breast, just as in the Paris copy, and holds between the thumb and first two fingers a pomegranate. These are probably duplicate copies of some famous work; perhaps the *Theodoros* of one of the inscriptions found was the author of both, and is identical with the famous Samian sculptor of that name (cf. Paus. VIII. xiv. 8; IX. xli. 1; X. xxxviii. 5; etc.: also, Mitchell, *History of Ancient Sculpture*, pp. 199, 200).

It is, of course, impossible to name all these statues. From the inscriptions found they would seem to be votive offerings; but whether they represent the divinities to whom they were set up, or the priests and priestesses, or the persons who set them up, there is no means of determining: several of them are evidently statues of Athena. They are all very ancient, and all, except the one characterized as Samian, belong to the so-called Delian school. They were probably buried where they were found, about the time the wall was built, that is, under Kimon. Something new is found almost every day, and these new additions to our comparatively scanty store of archaic sculptures are hailed with delight.

III. **POTTERY:** There have been but two or three vases found unbroken, and these were only small lekythoi of no special worth. There are bushels of pieces, but of little else than the black-figured vases of the earliest times, and none of the fine red-figured vases. The best pieces of this class are little *πινάκια*, votive offerings to some divinity. They are all small but one, and represent a great variety of scenes, as, for example, a woman washing clothes, a soldier standing in position of parade, etc. A very small fragment represents the birth of Athena: Zeus sits with his left hand extended before him, and from his head the goddess springs in full armor. The colors are peculiar: there is no black used, but the hair, the uncovered parts, except the faces, and parts of the dress are of a light blue, while the faces and other parts of the clothing are of a deep red. What has attracted more attention than anything else is a *πινάκιον* of this same kind, but much larger. It is about 2½ inches thick, and

somewhat more than two feet wide. The bottom is broken away, but its height was probably greater than its breadth. About the picture are drawn, as a frame, two lines, one black, the other a dark red. Inside this frame is a warrior armed with helmet (the plume of which as well as the metal part is not colored), spear, and shield. The design on the shield is a dancing black satyr with a long, red tail. Besides his armor, the warrior wears a red chiton and over this a black himation. The ideas of perspective, both in the relative position of the arms and the shield, are very much confused. Above, on a level with his head, are two words; the one on the right is distinct and reads *zalós*; the other may be *Παλαμῆδος* but cannot be read with certainty.

IV. INSCRIPTIONS. Quite a number of archaic inscriptions, on fragments of columns and on bases, have been found: they are partly metrical, formulæ of dedication to Athena, etc.

ATHENS, GREECE, Feb. 12, 1886.

WALTER MILLER,

*Member of American School  
of Classical studies.*

#### THE "MONUMENTAL TORTOISE" MOUNDS OF "DE-COO-DAH."

##### [Plate II.]

In the year 1853 a very queer book was published at New York, entitled *Traditions of De-coo-dah and Antiquarian Researches*, etc. The author was one William Pidgeon, a former trader among the Indians of the upper Mississippi. The book contained many drawings of symmetrical and intricate earthworks in the north-western States and Territories of the Union, together with a key to the history and signification of the same as given by De-coo-dah himself—"the last prophet of the Elk nation." The illustrations, however, were so novel, the classification of the mounds so elaborate and fantastic, and the traditions so wholly unsupported, that the work was not at that time, nor for years afterwards, recognized as authoritative; and was not mentioned by compilers of American pre-historic matters, such as Baldwin, Foster, etc. The fact is, that inspection of the best-known works on American antiquities, like those of Atwater, Squier and Davis or Whittlesey, showed but little, if anything, to justify the formal and significant shapes and positions of Pidgeon's embankments and effigies, and nothing at all to confirm the systematic arrangements of ordinary round mounds pictured so liberally in his book.

It sometimes happens, as students of cartography and geography well know, that a mistake made by some one is so often copied, unwittingly, by

others, that it becomes to the world at large an established fact. In like manner, Mr. Pidgeon's statements, which were not accepted by the Smithsonian Institution, the American Antiquarian Society, and other authorities of thirty years ago, are now gradually appearing in standard works on American archæology. Conant, in his *Footprints of Vanished Races* (1879), evidently accepts Pidgeon's earthworks, for he copies five diagrams of the geometrical kind and three of the effigy-shaped ones, not to mention a large part of the traditional matter. Bancroft, in Vol. 4 of his *Native Races of the Pacific States*, places Pidgeon and Lapham on an equal footing, as the original discoverers of the "effigy mounds." Ellen Russell Emerson, in her *Indian Myths*, etc., of the Aborigines of America (1884), quotes largely from "De-coo-dah," laying much stress on the symbolism. In Nadaillac's *Pre-historic America*, seven of the diagrams are given, as furnishing authentic information; but, curiously enough, although Pidgeon is accredited with having, in 1853, first brought the subject of animal-mounds to the notice of the public, this information has been obtained indirectly through the work of Conant above referred to. The expert bibliographer now conducting Sabin's *Dictionary* (1885), though deploring Pidgeon's "baseless hypotheses and unreliable traditions," seems not to doubt the value of the "very clear illustrations of many remains of Indian structures." With such conspicuous bell-wethers, doubtless other writers will, like unsuspecting sheep, take a like course, unless some one cry, Halt! Even Lucien Carr, a stout champion of the theory that the North-American mounds and inclosures "were the work of the red Indians of historic times, or of their immediate ancestors," writing in one of the publications of the Kentucky Geological Survey, narrowly escapes the precipice, for he thinks that the mounds can be sufficiently well treated under three heads, with the possible "exception of the animal-mounds, about which nothing definite is known," "unless (as he adds in a foot-note) the explanation given in that curious book, 'The Traditions of De-coo-dah,' should be accepted as authority, and this is scarcely advisable in the present state of our knowledge."

I do not want to be understood as charging Mr. Pidgeon with a deliberate and intentional fabrication of arrangements and conformations of earthworks which are entirely without example; but I have reason to know that it is not safe to quote his statements as authority, having personally examined many of the localities described by him. I will now treat of a particular point in "De-coo-dah," as a justification for writing this letter.

In chapters 5 and 8 of the book in question, among other things, will be found an account of a group of mounds on the Minnesota River (then St. Peter's River), visited by Pidgeon in 1840. According to his

narrative, he, in company with some French traders, ascended the river about sixty miles, when they arrived in the neighborhood of an Indian village, situated some two miles from the river, or presumably from their landing place; the natives there informed him that not far distant from them, up the river, were many mounds; he went to the spot and ascertained, by their agreement with De-coo-dah's description, that they were the mounds of which he was in search,—the "Title mound of the Black Tortoise" with its accompanying symmetrically arranged tumuli and embankments, erected to commemorate "the title and dignity of a great king or potentate," and for sepulchral purposes. Naturally enough, my curiosity was excited on reading about so wonderful a place, and I determined to make thorough search for it whenever a surveying trip should lead me in that direction, as the distance given by Pidgeon indicated a definite locality, namely, a point not far from the mouth of High Island Creek, a stream entering the Minnesota River from the west.

In October 1884, therefore, being in this vicinity, I took occasion to hunt up this "Black" or "Monumental Tortoise" collection of earthworks, in order to verify Mr. Pidgeon's account of it. After a thorough search, I found there but one group of mounds, which was situated on the N. W. quarter, section 26, Township 113, of Range 26, having on the north and west the valley of the creek above mentioned. Between this site and the Minnesota River was once an Indian village; and a great battle is said, on good authority, to have once taken place between the Dakotas and the Ojibways in that neighborhood. Under these circumstances, together with the fact that one of the mounds near the centre of this group corresponded to the "Black Tortoise" itself, I had no hesitation in coming to the conclusion that these earthworks were the same ones that Mr. Pidgeon described.

I now surveyed the entire group, taking the relative position of each mound with its diameter by tape line, and ascertaining its height by spirit-level. In order to make plain the difference between the appearance in the plan of the mounds most nearly central in position, as given by Mr. Pidgeon, and that which they actually present on the ground, I have prepared two outline diagrams for comparative study (*plate II*).

Figure 1 is copied from the original plate in "De-coo-dah," the shape of the mounds there given being exactly reproduced by the full lines. As, however, some of the dimensions found in the text vary from the engraving as scaled, a dotted line is added in such cases to indicate the variation in form thus produced. These differences, however, may arise from clerical errors, or perhaps be the fault of the draughtsman or engraver.

Figure 2 is plotted from my own field-notes, and, in order to show the mounds surrounding the "Tortoise," covers a somewhat larger space than the area pictorially occupied by Mr. Pidgeon's group.

It will be noticed that the central figure of both diagrams is practically the same; but there the resemblance ceases—unless we indentify his council-chiefs' mound with my No. 37. The relative positions of the mounds to each other, also, were probably, in the first case, merely sketched as they appeared, or seemed to appear, to Mr. Pidgeon from a given point. His heights and dimensions were undoubtedly mere estimates, and very poor ones at that. But how account for mounds of shapes so radically different from those that any other man ever heard of before or since our author's time? Or why so many more mounds represented than actually exist immediately around this central mound or tortoise?

Another puzzling point to be considered is the great disproportion between the heights and diameters of the mounds described in "De-coodah." For instance, the author describes the "prophets' burial-mounds," situated next the central figure, on the east and west, as being twelve feet long, six feet wide, and four feet high. The following table gives the height and diameter of the principal mounds of the group, according to the book, together with the deduced ratios of the two dimensions.

Name or Kind.	Cross-section.		Ratio.		Position on plan (Fig. 1).
	Height.	Diameter.	Height.	Diameter.	
Monumental Tortoise,	12	27	44	100	In centre.
Mounds of extinction,	6	7	86	"	{ Immediately N. and S. of centre.
Mourning mounds,	12	27	44	"	At the four corners.
Points of royal honor,	8	12	67	"	{ Outside line, E. and W. of centre.
Prophets' burial-mounds,	4	6	67	"	{ Immediately E. and W. of centre.
War-chiefs' burial-memorial,	12	27	44	"	Outside line, S. of centre.
Council-chiefs' memorial,	4	22	18	"	Outside line, N. of centre.

Any one at all familiar with the works of the Mound-builders will see, at a glance, that mounds thus proportioned (except the last one) are improbabilities, to say the least; as the figures of the first six lines imply angles, with a horizontal plane, of from 41 to 60 degrees. For my part, I can state that of the six largest conical mounds measured by me in various localities, ranging between 12 and 18 feet in height, the ratio of height

to base was from 15 to  $19\frac{1}{2}$  to 100, equivalent in angle to from  $16\frac{1}{2}$  to  $21\frac{1}{2}$  degrees. In the case of a seventh, however, a truncated mound twelve feet high, situated on the Crow River, Minnesota, the proportion was 28 to 100, or an angle of  $29\frac{1}{2}$  degrees with the horizon. If such departures from all likelihood existed in this instance only, they could be overlooked: but they occur in the descriptions of all the groups that Pidgeon mentions as having been surveyed by him in the North-West, and cannot be ascribed to blunders made in connection with the publication of his book.

Besides the Minnesota River group, I have visited and critically examined other localities described by our author in south-western Wisconsin and north-eastern Iowa, and in addition have made many inquiries, of old settlers, concerning him and his claims. At Trempeleau, Wisconsin, I talked with the daughter of his one-time host, the Kentuckian who had a squaw wife. The result of all my researches in this respect is to convince me that the Elk nation and its last prophet De-coo-dah are modern myths, which have never had any objective existence; and that, consequently, the ancient history in the volume is of no more account than that of the Lost Tribes in the Book of Mormon.

T. H. LEWIS.

ST. PAUL, MINNESOTA, December 28, 1885.

## REVIEWS AND NOTICES OF BOOKS.

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TRAITÉ D'ÉPIGRAPHIE GRECQUE, par SALOMON REINACH, précédé d'un Essai sur les Inscriptions Grecques, par C. T. Newton. Paris, E. Leroux, 1885. 8vo, pp. xliv, 560.

Let us suppose that the student of Greek has decided to extend his knowledge of the language and life of Hellas, beyond the limits of our literary sources, into the domain of inscriptions, where the faults of centuries of copyists and the chances of transmission no longer stand between us and the original utterance, and where the splendid apparel of literary form is for the most part doffed, and we see the people themselves with garments girt ready for the busy activities of every-day life. With such determination, the student will provide himself with certain books that are absolutely essential. Hicks' *Greek Historical Inscriptions*, and Dittenberger's *Sylloge Inscriptionum Graecarum*, will furnish him with a large body of material arranged chronologically and accompanied by a series of most helpful commentaries. Cauer's *Delectus Inscriptionum Graecarum*, and Collitz's *Griechische Dialekt-Inschriften*, will serve his purposes for the study of dialectology, free from the admixtures of the eclectic poet; and Kaibel's *Epigrammata Graeca* will exhibit to him Greek poetry hobbling on her lame foot. If he should have at hand Boeckh's great *Corpus*, and the *Corpus Inscriptionum Atticarum*, he will be fortunate indeed. He will not content himself with the texts themselves, but will proceed at the outset to take a careful survey of the origin, growth, and changes of the alphabet, that he may be able to fix the date of an inscription, and often its place of discovery or origin, within reasonable limits, at first sight. For this purpose, Roehl's *Inscriptiones Graecae Antiquissimae* will be necessary for the fac-similes, and Kirchhoff's *Geschichte des Griechischen Alphabets*, or Taylor's *The Alphabet*, for proper guidance. Setting to work with this material, he will soon find how difficult a task it is, to acquire a comprehensive view and arrive at the criteria that guide the masters of the art in their determination of minute points; and he will be compelled to resort to the numberless special articles in periodicals and monographs, where many of the recent inscriptions have been published or made the subject of discussion. Even here he is referred from one



treatise to another, each more difficult or impossible to obtain, till he is inclined to abandon the search, with information incomplete and fragmentary.

The great desideratum has been a manual which should offer a survey of the whole field, and present the chief results obtained by all the laborers in the past, arranged and reduced to order by a practical epigraphist who has made it his business to study all the special articles and treatises with this view. The *Elementa* of Franz is still a work of considerable value, but it is out of print and difficult to procure, as well as costly. But, more than this, it is now nearly half a century since it was published, a period in which the number of known inscriptions has been fairly trebled, and the foundations of the art of interpretation have been reconstructed and built upon a base so broad and firm, that it is not likely to be greatly disturbed, as a whole, by future discoveries. Publishers as well as epigraphists have perceived the need of supplying its place, and we are told that the great masters in the art have declined to risk their reputations upon the venture: but M. Reinach has at last, to borrow his own expression, leaped, like another Curtius of Roman story, into this chasm in the forum of erudition, with the hope of closing it successfully, for our generation at least.

As an introduction to the minute study of the subject, he has translated Mr. Newton's *Essays on Greek Inscriptions*, originally published in the "Contemporary Review" and the "Nineteenth Century," and more recently embodied in his *Essays on Art and Archaeology*, 1880. Mr. Newton has here described and given the substance of the most important of the inscriptions relating to historical events, to temples, rituals and ministers of religion, religious associations and clubs, dedications, and sepulchral monuments; and thus offers a general survey of extreme value for subsequent work. To these essays M. Reinach has wisely added, in foot-notes, the originals of the most important inscriptions discussed, and he has embodied in the text, among other things, an account of the great Delian inventory and a full translation of the Epidaurian stele of miraculous cures. This occupies 174 pages of M. Reinach's work, which then proceeds to the history of the alphabet, with its chronological tables and tables of abbreviations. Lenormant is followed for the most part in this chapter, and especially in the derivation of the supplementary letters of the alphabet, though the views of others are given. The second chapter is of especial interest to the grammarian and orthographist, whose subjects are treated at considerable length upon the basis of Attic inscriptions, covering much the same ground as the excellent work of Meisterhans, which appeared in time only to be referred to by Reinach in his appendix. The varied contents and usefulness of the succeeding portion may be seen

from some of the headings, as follows: The mode of engraving inscriptions, the material on which they were cut, and the places where they were exposed to view; the engravers (whose designation in Greek is not known), the various secretaries who are directed to superintend the cutting, the expense of engraving, errors of the cutters; the treaty cited by Thukydides (v. 47) and the original stele; headings of inscriptions, formulas of Attic decrees and those of other states, proxenian and honorary decrees; consecrations, statues, dedications, ex votos, oracles, letters; judicial, choragic and ephebic inscriptions; epitaphs, imprecations, signatures of sculptors; inscriptions on vases, pottery and engraved stones, lead and ivory. The last chapter is devoted to that difficult and perplexing study, Greek eras, years and months, to Greek proper names, and to a considerable list of Latin terms relating to the administration of government under the Romans, with their Greek equivalents, taken for the most part from inscriptions. We can touch upon the detailed treatment of only a few of these general heads.

On the subject of hiatus and movable  $\nu$ , M. Reinach speaks with no uncertain sound. He contends that the old Attic sought for that which became hiatus in the new, concurrent vowels being elided or fused, so as to present no hindrance to the flow of speech, while  $\nu$  ephelestikon was employed to prevent the deadening of short final syllables, and to please the ear with an assimilation which bound the words more closely together. Hence, he formulates the following rules, true in principle though subject to many exceptions: 1. So long as the pronunciation assimilated the consonants and the vowels at the end and beginning of words, the forms in  $\nu$  were employed before consonants, those in vowels before vowels. 2. As soon as the pronunciation ceased to assimilate the consonants and the vowels, the language began to use the forms in  $\nu$  before vowels, those in vowels before consonants. This latter tendency, which appears from the fourth century B. C., is not rigidly regarded even in the last epoch of the language. In accordance with the first rule, the text of Thukydides should be constituted, always, for instance, employing  $\mu\epsilon\chi\rho\iota$  instead of  $\mu\epsilon\chi\rho\iota\varsigma$ , as shown by the inscriptions. In metrical inscriptions  $\nu$  is sometimes employed where it destroys the metre, while vowels to be elided are occasionally left undisturbed. Of the last, in addition to the examples cited by Reinach, we may instance two cases in the halting lines of Kleo's dedication embodied in the Epidaurian stele of miraculous cures, a fact which may have hindered Kabbadias from recognizing them as metrical.  $\epsilon\delta\omicron\upsilon\tau\epsilon\nu\ \tau\tilde{\eta}\ \beta\omicron\upsilon\lambda\tilde{\eta}$  is always written in inscriptions, even in the earliest Attic decree now known, not that of C. I. A. i. 1, in the British Museum, but one earlier by more than a century, published by Koehler in the *Mitthei-*

*lungen* (ix. p. 117) and relating to the occupation of Salamis by Kleruchs in the time of Solon.

The errors of copyists of manuscripts have been made a special study by many, and M. Edon has performed this task for Latin epigraphy; but for Greek it was left to M. Reinach to examine and catalogue the errors of engravers of inscriptions, and thus place this important subject in its proper light. Many have sounded portentous warnings against the acceptance of inscriptional forms as criteria for our literary texts, and prefer rules of their own devising. It is true that stone-cutters had their errors, as well as copyists, and corrections are occasionally found in the stones themselves, while other errors remain unnoticed. In one case (C. I. A. ii. 17), belonging to the year 378 B. C., ten letters are written over a line in a later hand among which occurs the lunar formed E. This form of E and  $\xi$  is noted by Reinach (p. 207) as not appearing in Athenian official epigraphy before the single example of the years 48-42 B. C. Surely, the E of the Attic boundary-stone, 305 B. C., (Dittenberger, S. I. G., No. 435) should have been mentioned, though it is not in an official inscription. A distinction is very properly made between the documents engraved for the State by competent handicraftsmen under the supervision of educated secretaries, and those which were made for private persons at their own expense. M. Reinach has given a table of the most frequent confusions of letters, from which he concludes that those of M and N ( $\mu$  confounded with  $\eta$ ,  $\nu$ ,  $\pi$  :  $\nu$  with  $\mu$ ,  $\sigma$ ) prove that the writing of the originals, furnished by the secretaries to the engravers to copy from, differed considerably, in several letters, from the uncials of the Hyperides MS., and approached more nearly to the cursive and minuscule. Especially, the confusion between M, N, and  $\xi$  shows that the lunar sigma must have been almost unknown in this chirography, when it was employed in our most ancient uncial MSS. Almost all errors of suppression are explainable by the vulgar pronunciation or by the influence of neighboring letters or words. Additions are more rare than suppressions, and are in general due to the same causes. In fine, the errors of the engravers, even when most numerous, are of an importance wholly secondary, and can never render the texts worthy of rejection or disregard: they are errors purely mechanical, for which the eye and the hand alone are responsible, and which have not been at all increased by the literary or exegetical pretensions of a reviser. Under these conditions it is rash to attempt violent conjectures in an epigraphic text; for example, to expel a word or change the order of a phrase; but it is permissible to alter certain letters when their presence in a word renders a well-known form either barbarous or inexplicable.

On the other hand, our author comes to the defence of our literary texts with little less vigor. After pointing out the differences which exist between the treaty in Thukydides (v. 47) and on the stele which has been preserved of it, he continues: "However numerous may be the errors in detail committed by the copyists of our MSS., it seems to us contrary to good sense, in reliance on the comparison which precedes, to refuse almost all authority to the manuscripts, and to throw the text of Thukydides, like a victim without defence, a prey to the aggressive instincts of verbal criticism (*emendatio*). On the contrary, if one will examine dispassionately the differences that have been shown, he will perceive that they are of little importance after all, and that, exactly where the extremists have seen reason for the unreserved condemnation of the copyists, one can find a proof of their care and relative exactness. If one were to believe certain critics, a text, after having been copied twice, would be altered to the point of being unrecognizable, since, by their showing, copyists are surrounded by so many temptations and chances of error; but one is quite astonished, on comparing the original with a copy made sixteen centuries later, to find so few differences of detail and so perfect an agreement in substance."

M. Reinach devotes a considerable part of his introduction proper, to the traveller who sets out with the intent to discover and copy inscriptions. Such a traveller should first inform himself, as far as possible, touching all the inscriptions that have heretofore been obtained from the region to be visited, and should carry with him a pocket *Corpus* of all such, transcribed for use in determining whether any stone he meets with has or has not already been copied, or in order that, with the original before him, he may decide whether the errors of his predecessors will justify him in spending the time necessary to copy it. Then follow, minute directions for guidance in taking impressions, copies and photographs, and as to the materials and instruments that have been found most efficacious; warnings gathered from the unhappy experience of the past; rules for reducing a copy to the proper form for publication and comment; and so on, altogether forming an admirable field-book of epigraphy. We are glad to see that he urges strongly the custom adopted by the American Institute of Archæology, namely, to present a translation as an accompaniment to every new inscription published, a custom which editors are sometimes quite content to honor in the breach.

In a treatise upon a subject where a new discovery at any moment may alter some matter of detail, M. Reinach has strenuously essayed to lay before us the latest results, almost to the day of publication; and he even refers to articles yet to appear in the periodicals. Nor has he neglected anything of special value in the past. He has not only ransacked the

four corners of the subject, but has shown himself possessed, withal, of an unwearied diligence in laborious painstaking, combined with a happy faculty of extracting the vital point of a complicated discussion, and of turning the brightest facets of his diamonds towards us. If the man deserves well of his country who makes two blades of grass grow where there was but one before, signal is his merit who arranges, classifies, and reduces a great subject, and thereby diminishes so vastly the labor of acquirement in the ever widening and ever overburdening field of learning.

AUGUSTUS C. MERRIAM.

**TIRYNS:** The Prehistoric Palace of the Kings of Tiryns, the Results of the latest Excavations, by DR. HENRY SCHLIEMANN, Hon. D. C. L. Oxon., &c., &c., &c. The Preface by PROFESSOR F. ADLER, and Contributions by DR. WM. DÖRPFELD. New York, Chas. Scribner's Sons, 1885: pp. lxiv-385, twenty-seven plates, a map and panoramic view, and 178 cuts in text.

This interesting book has been brought out with exceeding promptness. The "latest excavations" described in it are those of 1885, from the middle of April until the middle of June: that is to say, that no magazine article, with illustrations, was ever prepared and put through the press more quickly than these final chapters. The natural result is, that the book is a series of reports rather than a treatise. We are told of interesting finds in the spring of 1884, and of others in the spring of 1885. The pottery and other moveables are well described, the earlier found by Dr. Schliemann, the others by Dr. Ernst Fabricius; but these are detached papers. The remains of buildings, as explored in 1884, are taken to mean that which it was quite clear in 1885 that they did not mean; Dr. Dörpfeld in the frankest manner leaving his first statement standing with his later views to contradict it, for all the world as if published in successive numbers of a review. We have, then, the curious result that the big and costly book does not contain the definitive discussion, nor even the complete and final account, of the discoveries at Tiryns; and that for these we must look to the review articles of the future, since another book upon the subject is hardly to be hoped for,—at least from Dr. Schliemann and his coadjutors.

Professor Adler's preface is of fifty-four solid pages, and contains a very interesting summing up of the discoveries, and especially of the remains of buildings,—but only as they were revealed to him by the inadequate excavations of 1884. This, however, is an extremely intelligent analysis

and comparison of fortress with fortress, Mykenai and "Troy" with Tiryns, and is full of suggestion. It appears, too, that the author foresaw the important discovery of the free use of clay mortar in the "cyclopean" walls of Tiryns, and was of opinion (page xi) that "all so-called cyclopean walls" would be found to have "a strong mortar of loam or potter's clay . . . used as bedding material . . . but dried up afterwards . . . and washed away." This preface is well worth study. Dr. Schliemann next takes 176 pages to describe, in the first chapter, the excavations in general, with chat about the country and the people, the daily habits of the exploring party, and their bill of fare, including *resinata*, which they seem to have liked; in the second chapter, the topography of the country, and the history and conjectural history of Tiryns; in the third chapter, the vessels and utensils of pottery and hard-stone (for there were none of metal, and almost none of glass or bone) found in the exploration of the "oldest settlement" on the Tiryns akropolis; and, in the fourth chapter, the far more numerous remains found in the débris of the later buildings. The pottery found here is of very great interest, and is well described in the text and well illustrated by colored plates and numerous wood-cuts. But, besides pottery and certain rough utensils in different stones, there is little. The pieces of bronze found were few and not very important, and there is just one piece of gold, one of silver, and one of iron, in all the Tiryns collection. With this chapter ends Dr. Schliemann's own part of the book, and the reader is left with the impression, that he has made the best use of very limited resources; that the work at Tiryns has only been begun, and that more is left than has yet seen the light: while, on the other hand, Dr. Schliemann's extensive knowledge of archaic pottery has enabled him to fill up the somewhat meagre list of new discoveries with interesting comparisons and analyses.

The rest of the book—just half—is made up chiefly of Dr. Dörpfeld's two important and careful chapters: first, the buildings of Tiryns as explored in 1884; and, second, the farther discoveries of 1885. The importance of these discoveries will hardly be denied. The distribution of the many courts, rooms and stairways is generally unmistakeable; the positions of altars and sacrificial pits and the hearths in the great rooms, are generally satisfactorily ascertained. But there exists no wall which is more than a metre in height, and therefore there is no trace of windows; nor, in the débris, is there any indication of what the roofs were like; and it seems to be from external evidence that our authors decide for flat clay roofs, like some of modern times. Most important of all would be, if we could but obtain it, some trace of the former defensive dispositions of the outer walls. Dr. Dörpfeld seems hardly to be aware of the immense interest of this enquiry. Of early Grecian defensive warfare the wildest



nonsense has been talked, nor can any one pronounce upon it with any authority. Even a few roughly shaped stones, found at the foot of the outer walls of Tiryns, might begin a new investigation into this unsettled question.

On the whole, the most important discoveries recorded in this book are the wall-paintings on plaster, and the floors of concrete mosaic in patterns; these, and the already mentioned and indisputable gain made in the discovery of the free and general use of mortar in these rough walls. These discoveries are worth all they have cost; and this book probably does full justice to the designs of floor and wall decoration. Otherwise, we leave the book with the feeling that it was made too hastily and brought out too soon. Our hopes of getting finally from Tiryns all that can be got must depend upon the care the Greek government will take of the now exposed remains, until a more patient and complete examination of them can be made.

RUSSELL STURGIS.

UNEDIRTE RÖMISCHE FUNDBERICHTE aus italiänischen Archiven und Bibliotheken veröffentlicht von THEODOR SCHREIBER. 8vo, pp. 80. Leipzig, 1885 [Aus den Berichten d. K. Sächs. Gesell. d. Wissenschaften, Phil.-hist. Classe 1885].

For a number of years an important share in the formation of the C. I. L. has been taken by the MS. collections of inscriptions made at various times by lovers of archæology and antiquities; collections of which we find examples in the earliest Middle Ages and in Carovingian times, and from that period in a continuous array up to the great antiquarians of the early and late Renaissance. These collections, made generally by travellers, were lying, unknown or forgotten, on the shelves of libraries; but are now studied and edited with the greatest care. To Comm. de Rossi we owe the opening of this new and fruitful field of research, of which he has also thoroughly availed himself for his *Corpus* of early-Christian inscriptions.

At almost the same time another interesting branch of research was begun: the study of MS. descriptions of antiquities found and collected during the preceding three or four centuries, especially in Italy. This study has been developed on two lines; the first, and perhaps the more important, being the inventories of the classic antiquities forming the collections of distinguished patrons of art of the xv, xvi and xvii centuries, a truly inexhaustible mine of riches. This study has not merely a retrospective value: it often enables archæologists to detect and trace



back to the time, place, and circumstances of their discovery many works in our present collections of hitherto unknown provenance, whose value has thus been greatly enhanced.

A second, kindred and hardly less interesting, field for investigation was found in the accounts of discoveries and excavations in Italy, especially in Rome, of which a great part still remain inedited. Prof. Th. Schreiber's pamphlet is an important contribution to the knowledge of these documents. A careful study of the important text of Flaminio Vacca (*Berichte*, 1881, p. 43 seqq.), published in a careless and arbitrary manner by Fea (*Miscellanea filologica critica e antiquaria*, Rome, 1780-1836), led him to the discovery, in the libraries and archives of Rome and other Italian cities, of a great number of documents relating to archaeological discoveries (in the Holy City), a part of which he here publishes. First in importance comes Francesco Valesio (1670-1742), whose shrinking and modest nature made him but little appreciated during his lifetime, but who industriously collected, in a diary of eleven tomes, notices of all the discoveries made from 1700 to 1742, the year of his death: a few specimens are published by Prof. Schreiber.<sup>1</sup> Card. Francesco Vetori (1710-1770) and Giovanni Bottari (1689-1775), both Florentines and devotees to archaeology, corresponded regularly with the noted Francesco Gori (1691-1759), to whom they communicated all the important archaeological news from Rome: many interesting extracts from these letters are here given. One of the most important of the Roman collections in the xvii cent. was the *Museo Puteano*, founded by Cassiano Dal Pozzo (1588-1657), and enlarged by his brother Carlo Antonio, who also kept an archaeological diary of considerable interest and extent. Of quite a different character is Cipriani's (c. 1660) work on the restoration of the Pantheon, including a minute description of all the discoveries which this restoration led to, especially those made during the reconstruction of the system of drainage throughout the Campus Martius.

A. L. FROTHINGHAM, JR.

<sup>1</sup> Valesio speaks of the discovery, near S. Luigi dei Francesi, of a large column of Oriental granite, and notes that three similar columns, placed in the portico of the Pantheon, were found in the same place. Another of these columns was found a few years ago, when digging on this site for the obelisk which was thought by some, from a passage of the *Mercurio Errante*, to be buried at this spot.

## ARCHÆOLOGICAL NEWS.

### SUMMARY OF RECENT DISCOVERIES AND INVESTIGATIONS.

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## AFRICA.

### EGYPT.

M. MASPERO left Cairo, January 10, on his annual archaeological tour in Upper Egypt. The probable site of Amu, the city of Apis, the capital of the third nome of Lower Egypt has been discovered, at Kom-el-Husn, three hours south of Naukratis (Kom Gaief), by means of two inscriptions.—*Academy*, Jan. 2.

*Stele of Amenophis III.*—In a letter to the London *Academy*, dated Jan. 4, 1886, and written at Siût, Prof. A. H. Sayce mentions the discovery by him, close by the famous tomb of the Colossus, of a stele of Amenophis III, dated the 2nd(3?) day of the month Payni, in the first year of his reign, stating that on this day the quarries had been opened by the king under the patronage of Thoth, the lord of Eshmunên, in order that he might embellish "the house of the feast of the new year," at Eshmunên. Amenophis is represented as standing before Thoth and Amun, to whom he is making an offering. The quarries, thus opened by Amenophis III, extend, from a point about a mile to the south of his stele, northwards to the cliffs above the ruins of Antinoöpolis. They include the line of quarries above Dêr Abu Hannes; and some belong to the age of the Ptolemies, others to Roman times.

The quarries above Dêr Abu Hannes, so full of remains of the early Coptic Church, have been carefully explored by Prof. Sayce, who is able to trace a history of the locality from the fourth century, when the hermits Victor, Kolluthos, Silvanus, Makarios, etc., took up their residence

in the old quarries, to the time when pilgrimages were made to their tombs, and two of the quarries were turned into churches. The frescos here and in one of the chapels are earlier than the Arab conquest; and the internal arrangement of the churches is full of interest.—*Academy*, Jan. 23.

**EGYPT EXPLORATION FUND.**—At the third annual meeting, held in London Oct. 28, 1885, Mr. John Evans, F. R. S., moved "that this meeting presents to the Fine Art Museum, of Boston, U. S. A.,—with sincere thanks to Rev. W. C. Winslow, Vice-President of the Egypt Exploration Fund,—a selection of antiquities discovered by Mr. Petrie and M. Naville." The motion was seconded by Miss Amelia B. Edwards, and thanks were given by Mr. Phelps, American Minister to England.—*Academy*, Nov. 7. These antiquities have recently arrived in Boston, and have already been placed in the Museum: a description of them may soon appear in the JOURNAL.

**ABYDOS.**—Prof. Maspero has cleared away the rubbish from the external walls of the temple of Seti on the southern and western sides.—*Academy*, Feb. 13.

**CAIRO.**—The famous Sphinx, which had been entirely covered up with about 20,000 cubic metres of sand, is being disengaged, and will be surrounded by a platform and a high wall to prevent further encroachments.—*Cour. de l'Art*, Feb. 26.

**EKMEEN.**—Prof. Sayce found here, in a tomb, three portrait figures, painted in the Roman costume, and about a foot and a half high, equal to the best paintings in the Pompeian collection at Naples.—*Academy*, Feb. 13.

**KANOPOS.**—Lieutenant Middlemass Bey has discovered in the ruins of Kanopos, near Abookeer, a well-preserved colossal red granite statue in a standing position, on the left of which is carved a pillar with the bust of a child. It has been uncovered, and Middlemass Bey has offered to transport it to Alexandria. As the hieroglyphs have not yet been deciphered, the identity of the statue has not been established.—*Egyptian Gazette*, Dec. 28; *Amer. Architect*, Feb. 20.

**LUXOR.**—The *Journal des Débats* of Dec. 6, 1885, gives a letter from M. Maspero, from which the *Courrier de l'Art* makes the following extract: "J'ai de bonnes nouvelles de Louqsor. M. Scott Moncrieff a décidé le Conseil des Ministres à considérer le déblayement comme une œuvre d'utilité publique. Un commissaire a été nommé pour exproprier les quelques maisons encore debout dans l'enceinte du temple et pour en indemniser les propriétaires aux frais de l'État. L'argent qui me reste de la souscription organisée par le *Journal des Débats* sera donc suffisant pour achever le gros œuvre et pour payer notre travail de cette année."

Il ne restera plus qu'à décider les cheikhs de la mosquée à s'en aller, ce qui ne sera peut-être aussi difficile qu'on pourrait le croire à première vue."

The work of uncovering the great temple is proceeding rapidly: some colossal granite statues of Rameses II have been brought to light, one being of exceptional finish and workmanship.—*Academy*, Feb. 13.

**NAUKRATIS.**—This season's excavations at Naukratis have already attained important results both in respect to topography and archæology. A colossal statue has been found with the inscription *Aam*, thus confirming the identification of the place with the chief of the Libyan Nomes. The excavation of the Greek cemetery has brought to light little beyond terracotta coffin-ornaments. A burial-place for animals has been found. The temples of Aphrodite and the Dioscuri are not yet completely excavated. Four columns of the temple of the Dioscuri have been found. They are of unburnt clay adorned with painted cattle. Also parts of the incrustation of the walls have come to light. In the temple of Aphrodite several votive vases of local manufacture were found.—*Berl. phil. Woch.* Jan. 16.

The excavations here were continued by Mr. Gardner, when Mr. Petrie left for his work in the eastern part of the Delta. The work on the temple of Aphrodite has led to the discovery that the two temples, whose different levels were found, were built on the walls of a yet earlier structure, which must take its place among the primitive Greek temples of Naukratis. In a trench, cut here, were found the finest specimens of Naukratis ware yet known. The great altar of the earliest temple was found in place.

The cemetery has lately been yielding finds of great interest: it is full of graves of all periods, from the sixth to the third century B. C. The coffins are either of earthenware or wood. Mirrors and lamps have, in several cases, been found; small vases too in great number, but not many of fine work. Later work on the temple of Aphrodite has led to the finding, among the strata of archaic pottery, of numerous archaic statuettes of terracotta or soft stone, all of which seem to belong at latest to the beginning of the VI century B. C.—*Academy*, Jan. 30 and Feb. 6.

#### TUNISIA.

During their exploration in Tunisia, in March and April of 1885, MM. Reinach and Babelon (cf. *JOURNAL*, vol. I. p. 222) discovered the sites of four ancient cities: *Uccula*, at Aïn-Durat, 18 kil. N. W. of Medjez-el-Bab; *Municipium Septimum liberum Aulodes*, 10 kil. N. of Uccula; *Thibar*, at Henchir-Hammâmet near Mt. Gorra; *Thimbure*,

at Kourbaria, 12 kil. from Thibar, on the road to Teboursouk.—*Revue Archéologique*, Sept.-Oct., 1885, p. 238.

**MESHERASFA.**—*Christian inscriptions.*—Three Christian inscriptions have been copied here by M. Poinssot:—(1) *C. Vetti. Auni et . . . ei. soro|ribus . qui ante . . . . dormierunt et . Iuliae maximae matris ve valente . aci . . . dan. ccclx et g iii.* Its date is 369 of provincial era, corresponding to 408 A. D. The formula *qui ante* [me (or nos) in pace] *dormierunt* is new. (2) *De Di et Xpi: Umbrus Felix, mag|fecit votum reddidit Do precatur pro suis peccatis salvifectur ap ecclx et g iii.* Date the same. (3) *D M S De Dei et Christi voluntas|pius Demetri una cum Domitias|sore marti V Lucciosa fecerunt . . .|patri sui Donati s. a . . . . anno . . . .* M. de Villefosse proposes to read, at the beginning of the two latter inscriptions, *De donis Dei*. Another interesting inscription of the year 419 comes from Arbal: *D. M. | L. Eppidius Cassus | qui nos precessit in p(ae) | et viciit an(nos) p(lus) m(inus) LXXIII | Uxor una cum filio fecerunt an(no) p(rovinciae) CCCLXX.* Observe the *D. M.* and the *tria nomina*.—*Bulletin Trim. des Antiq. Africaines*, Oct., pp. 188-91.

## ASIA.

### CHINA.

*Roman Coins.*—It is reported that the curious discovery has been made, in the province of Shang-Si, of a collection of Roman coins embracing not less than thirteen reigns, between Tiberius and Aurelian.—*Cour. de l'Art*, Feb. 5.

### ANNAM.

In the last number of the *JOURNAL* (vol. I, p. 423) the importance of M. Aymonier's researches in Cambodia was signalized. The inscriptions copied by him in Annam are still more interesting. He brought back from Quinhu rubbings of about fifty inscriptions, taken in the provinces of Binh Thuan, Khanh Hoa, Phu Yen and Binh Dinh, all belonging to the ancient kingdom of Champa (known to Marco Polo as Ciampa or Cyamba), which extended as far as Tonkin, and from which the Annamites issued to conquer the whole east coast of the Indo-Chinese peninsula. Its civilization was derived from India, including the introduction of several forms of Brahmanism and Buddhism. Some of the inscriptions are in Sanskrit, some in an old form of the Cham language, which is still spoken in the province of Binh Chuan; and the characters used are the alphabet of Southern India. The names are given of twenty kings, all terminating in —*varman*, whose reigns extend from 706 to

1358 of the Saka era: i. e., from 784 to 1436 A. D. Other inscriptions, which are not dated and which are written in a character much more archaic, probably go back to the seventh century A. D., and possibly even earlier. The dated inscriptions are full of historical evidence relating to the wars waged by the kingdom of Champa with Java, with Cambodia, with China, and with Annam.—*Academy*, Jan. 2.

# ASIA MINOR.

The results of the two expeditions sent out at the expense of Count Lanckoronski for the archaeological exploration of Pamphylia and Pisidia are beginning to be known. The first visited and explored in 1884 especially the sites of Adalia, Sylleion, Aspendos and Side, Selge and Sagalassos. The second expedition visited, during last summer, Termessos, Kremna, Perge, Sagalassos, Aspendos and Side. The results have been, a far more perfect map of Pamphylia, reaching as far north as the lake of Ejerdin; careful plans of cities; numerous architectural surveys (e. g., theatres of Aspendos, Side, Perge, Termessos, Sagalassos; odeums, gymnasiums, public fountains, temples, tombs); about 300 new inscriptions, mostly Greek, some in early dialects and having traces of the early native language in the proper names. An important work embodying all these discoveries is about to be published.—*Berl. phil. Woch.*, Feb. 13.

**EPHESOS.**—It was known, from a Latin and Greek inscription published by Mr. Wood (*Ephesus*, Inscr. p. 2), that the wall surrounding the Augusteum was built in the year 6 B. C. under the proconsul C. Asinius Gallus. The following interesting inscription relating to it has recently come to light. *Υπερ τῆς τοῦ [χυρίου ἡμῶν] | Ἀποκράτορος Τ[ίτου Καί]σαρος ὁγνῆας καὶ διαμονῆς τῆς | Ρωμαίων ἡγεμονίας ἀποκατεστάθη τὸ βλαβὲν περιτείχισμα τοῦ Ἀύγουστῆον, διατάξαντος Μάρκου Οὐλπίου Τραϊανοῦ τοῦ ἀνθυπάτου, ἐπιμελῆ, θέντος Πομπωνίου Βάσσου τοῦ πρεσβευ[τοῦ], τῆς ἐπιχορηγίας γενομένης ἐκ τῶν | [ἐρῶν] προσόδων, γραμματεῦντος Λου[χίου] Ἐρεννίου Περεργεῖνου ἀγροῦ τὸ β.* This inscription tells us that the wall, having been damaged, was repaired under Titus by order of the proconsul M. Ulpius Trajanus (proconsul of Asia 79–80), father of the Emperor Trajan, through his legate Pomponius Bassus.—*Bulletin de Corresp. Hellénique*, Feb. 1886, p. 95.

**MYTILENE.**—The Turkish Governor, Fakry Bey, is engaged in clearing out the amphitheatre of Mytilene, which is said to have been the model of the Colosseum at Rome. He is also conducting archaeological explorations on the island.—*Athenæum*, Jan. 16.

# KYPROS.

The excavations carried on by Mr. Ohnefalsch Richter on the island of Kypros during 1885 have been of considerable importance, and,

though not yet fully published, a detailed report has been made, from Richter's materials, by M. Reinach in the *Revue Archéologique*. This report comprises all the work of Mr. Richter since 1880, but we will confine ourselves to that of 1885, at Idalion-Dali, Nikosia, and Tamassos.

**IDALION-DALI.**—The temple belongs to the Greco-Phœnician period, and must have been destroyed several centuries before our era. It comprised (1) the sanctuary; (2) the vestibule, containing the ex-votos; (3) the precinct for sacrifices. The sanctuary was consecrated to Aphrodite, and nearly all the statues found were female. Several hundred terracottas of many types were found: (1) praying female figures with raised arms, of Phœnician type (cf. figs. 376, 394-396, 403, of Perrot and Chipiez's third vol.); (2) female musicians; (3) priestesses, etc. All these are rudely made by hand. A second class of similar character are made partly from a mould and have hand-made arms and attributes added. A third class are entirely from a mould and represent especially the goddess in various aspects: the earliest represent her robed; and only where Phœnician influence was in the ascendant over the native was the undraped figure used. The most primitive terracottas of Dali are proto-Babylonian, then Assyrian, and finally Egyptian or Greco-Oriental; while the earliest statues in calcareous stone are Egyptian in style, those influenced by Phœnician art being later and inferior. The large terracottas are all richly colored, while the stone statues have only some red, and seldom yellow, coloring.

**NIKOSIA.**—*Necropolis of Hagia Paraskévi.*—Here were found most of the Kypriote vases now at Constantinople, and also a fine Assyro-Babylonian cylinder. Excavations were carried on here in August and September. Of the several hundred vases found only four are painted: all the others are without decoration, or have ornaments incised or in relief. The vases with reliefs form a most interesting group, which does not yet show any Phœnician influence and belongs to a very early age.

**TAMASSOS.**—Mr. Richter hopes to have discovered at *Hagios Janis tis Malluntas* (near Nikosia) the necropolis of Tamassos; gold jewelry, diadems, earrings, but no glass, have been found. Most of the vases are unpainted. The excavations are to continue.—SALOMON REINACH in the *Revue Archéologique*, 1885, II, pp. 340-364.

## EUROPE.

### GREECE.

**ATHENS.**—*Distribution of Antiquities.*—The Minister of Education has determined to distribute the antiquities stored in his office, as general



superintendent of antiquities. Some he will give to the Archæological Society, others to the Patissia Museum. There are sculptures, as well as terracottas, bronzes, and vases. The most famous piece is the so-called Lenormant Athena, discovered in 1859 west of the Pnyx. The collection has especial value for students, since the source of most of the pieces is officially established.—*Athenæum*, Nov. 21.

*Museums.*—Up to the present time antiquities have been distributed among a number of museums: (1) that on the Akropolis; (2) the Central or Patissia Museum; (3) the collection of the Archæological Society at the Polytechnikon. Beside these there were smaller collections in various places, and the collection of coins at the university. A new decree entirely changes this arrangement, and orders all antiquities, large and small, of every description, found in or brought to Athens, to be placed in the Central Museum, where they are to be chronologically arranged, and catalogues of them are to be printed. A select collection of casts from foreign museums is to make the series more complete. The only exception is made for antiquities (except inscriptions) found on the Akropolis: these are to be placed in the Museum of the Akropolis. An important change is the daily opening of all the museums; and an entrance-fee of 1 franc is charged, except on Saturdays and Sundays when the entrance is free. Archæologists, artists and students can obtain cards for free admittance.—*Athenæum*, Jan. 9.

*The meeting of the Congress of Prehistoric Archæology and Anthropology*, which was to take place in Athens this spring, has been definitely postponed. The Minister of Education, having been informed of this decision by the late Minister in Berlin M. Rangabé and Dr. Schliemann, has caused all preparations to be stopped.—*Athenæum*, Nov. 21.

*AKROPOLIS.—The recent discoveries.*—Toward the centre of the northern part of the Akropolis, between the Erechtheion and the Propylaia, the foundations of a building of unknown character had been partly uncovered by the French School some years ago. On Feb. 5th and 6th discoveries were made here of the greatest importance for the history of early Greek art. The most important are an entire series of painted statues of Athena belonging to the VI century B. C. Among other objects are several steles and three fluted columns with inscriptions giving several names of early sculptors. These discoveries have made a great sensation, and the *Pall Mall Gazette* by telegraph secured photographs, and obtained an article from the pen of Dr. Charles Waldstein, director of the Fitzwilliam Museum (Cambridge). Accounts have appeared in the *Ἀκρόπολις* of Athens, the *London Times* (March 12), the *Courrier de l'Art* (Feb. 26); but the most complete is given in this issue of the

JOURNAL (pp. 61-5) by Mr. W. Miller, a member of the American School of Classical studies in Athens.

A colossal bronze statue has been found on the Akropolis. It is a draped female figure holding up her right hand as if taking an oath. Also a terracotta slab, 55 mm. thick, 51 cm. wide and 385 mm. high, upon which, in high relief, is the figure of a man wearing a breastplate and helmet. Traces of color are preserved. Above the head of the man is a very early inscription ΚΑΛΟΞ.—*Berl. phil. Woch.* Jan. 2.

Painting of the v cent. B. C.—Recent excavations on the Akropolis have brought to light a painting representing a warrior with helmet, shield and spear, accompanied by an archaic inscription. It is said to date back to the v cent. B. C.—*Cour. de l'Art*, Feb. 5.

Early Temple of Athena.—Dr. Doerpfeld opposes the universally accepted theory, that the great temple of Athena in early times stood on the site of the present Parthenon and was destroyed by the Persians before it was finished. Between the Parthenon and the Erechtheion, and by the latter, is a plateau 45 met. long by 22 wide, in which are remains of walls. In these walls Doerpfeld recognizes the remains of this great early Temple of Athena destroyed by the Persians. It was built of poros-stone and was peripteral in form: it has resemblances to the old temple of Dionysos in Athens and to that of Eleusis. The Erechtheion was built partly over this temple.—*Mittheilungen*, 1885, III, p. 275-77.

Prof. Rhusopulos has found a cup, on the white ground of which is Antigone in the act of rendering the last duties to her brother Polynikes who lies on the ground. The head of Antigone is of great beauty and in perfect preservation.—*Cour. de l'Art*, Feb. 5; *Berl. phil. Woch.* Feb. 20.

Church of St. Dionysios.—Excavations have recently been made about the old Christian church of St. Dionysios the Areopagite. The purpose of the digging was to find the old floor of the building. Many graves have been laid bare, containing colored-glass vases and a fragment of an old Greek relief. Two Doric, and one Byzantine, columns were found.—*Athenæum*, Nov. 21.

BOIOTIA (PERDIKOVRYSI).—Temple of Apollon Ptoos.—The statue found here, and mentioned in the JOURNAL (vol. I, p. 433), is illustrated in the *Bull. de Corr. Hellén.* (Jan. 1886) by M. Holleaux. It is of a greyish-white marble, and is broken below the knee, the present height being 1.30 met. It represents a man standing erect in a fixed attitude and is of the same type as the so-called Apollos of Orchomenos, Thera, Tenea, Delos, etc. These statues are divided into two groups, the one headed by those of Thera and Tenea, the other by that of Orchomenos. This statue of Perdikovrysi belongs to the latter group, but marks a great progress over the Apollon of Orchomenos. An entire series of statues similar in type,

some more ancient, some later than the one described, have been found, all belonging to the early Theban school. The earliest fragment appears to be the copy of a wooden ξύανον, of which only the lower part remains, with a fragmentary votive inscription: . . . [ο?]ον ἀνέθηκε τοῖ Ἀπόλλωνι τοῖ Ἡφαιστῷ . . . οτος ἐποίησε. The third line contained the name of the sculptor. It is probably a work of the VII cent. B. C.

In the February number of the *Bulletin*, M. Holleaux illustrates a remarkable archaic head in white marble, slightly larger than natural size, which, he thinks, belongs to the earliest period of stone sculpture in Boiotia, when the technique was the same as that of the sculptors in wood; dry, hard and angular. It is similar to, though perhaps a little later than, the Apollon of Orchomenos.

The excavations in Boiotia have lately brought to light two bronze lions of archaic style and in good preservation, as well as an archaic stone statue of Apollon, and some *boustrophedon* inscriptions from which it appears that near the temple of the Ptoian Apollon was a sanctuary of Athena.—*Berl. phil. Woch.* Jan. 2.

DELOS.—The important discoveries made here by the French School were mentioned in the last number of the *JOURNAL* (I, p. 433). In the last number of the *Bull. de Corr. Hellénique* (Feb. 1886, pp. 102-135) M. Durrbach published some very important decrees of the III and II centuries, found there in July and August. The first, in honor of the Rhodian Athenodoros, is a new proof of the close relations that existed, after Alexander, between the two islands of Rhodes and Delos: while others show the extent of the sovereignty of Rhodes over the archipelago and the littoral at the close of the III and during the II century. The fourth stele contains (1) a decree of Delos, according to the Makedonian Admetos a crown and two bronze statues; (2) another, specifying that one statue should be placed at Delos, the other at his birthplace, Thessalonikê; (3) a decree of Thessalonikê, in accordance with the preceding. According to the text, one of these statues was to be placed at Delos in the interior of the temenos of Apollon, by the side of the altar of Zeus Polieus: the base of this statue has been found, thus determining an interesting point of Delian topography.

EUBOIA.—G. Lampakis, guardian of antiquities in Eretria and Chalkis, has made in his district some important discoveries, including several inscriptions and a life-size marble statue.—*Berl. phil. Woch.* Nov. 28.

KRETE.—The Greek Society of Herakleion has commenced excavating at the so-called *Zeus Grotto*, where an inscription has come to light which runs thus: Δὲ Ἰδαίῳ ἐγχερ' Ἀστὶρ Ἀλεξάνδρου.—*Athenæum*, Nov. 21.

## ITALY.

## PREHISTORIC AND CLASSICAL ANTIQUITIES.

**ALLUMIERE.**—To the N. of *Poggio della Pozza*, and near the esplanade where the tombs of the first iron age were found, there has come to light, part way down Monte Rovello, a stratum of débris including many fragments of pottery of the Villanova type: this shows the vicinity, at a very early period, of an important centre of population connected with a metal-foundry. The discovery was made by Mr. A. Klitsche de la Grange.—*Bull. d. Istituto*, Oct. 1885.

**CASTIGLIONE DEL LAGO.**—In a hall-tomb some very interesting objects have been found, which have been bought for the Museum of Florence: (1) a cinerary urn of black ware in the shape of a rectangular temple, in evident imitation of wooden Etruscan buildings; the triangular pediment is decorated at the summit with a ram's head; in the centre of the rib of the roof is a panther's head: (2) another cinerary urn, partly of Korinthian and partly of Etruscan type: (3-8) cups, kyathoi and skyphoi of various types, Italo-Pelasgic, Etruscan proper, and Greco-Oriental: (9-10) two proto-Korinthian vases, alabastron and aryballos: (11-17) bronzes: (18-19) objects in bone. These objects were placed in a main chamber cut in the tufa and in two accessory cells or niches. The first cinerary urn is of especial importance, as it fixes the period of the use of urns in the shape of temples. This period is that of the first relations of North Etruria with Magna Grecia and Greece (600-550 B. C.).—*Not. d. Scavi*, 1885, p. 500-502.

**CHIUSI.**—In a tomb a camera were found several articles accompanying a female skeleton. Encircling its head was a gold crown of laurel ornamented with gold leaves: on each side is stamped a group of figures. In a wooden box were (1) a circular mirror with a graffito of Perseus cutting off Medusa's head in the presence of Minerva; (2) a situla or small bucket in cast bronze with figured reliefs—quite a rarity. It is similar to that found at Bolsena (now in the *Museo Etrusco*, Florence), and is decorated with three scenes. The probable date of these objects is the III century B. C.—*Bull. d. Istituto*, 1885, p. 200.

**MONTE CAVO.**—Three small objects of Egyptian workmanship were found here: (1) an amulet in blue majolica with the symbol Ded, to be placed around the neck of a mummy; (2) a figure of the demon Amset, and (3) one of the goddess Nephthys; both belonging to the toilet of a mummy. Dr. Erman considers them to be purely Egyptian works and not Phœnician imitations.—*Bull. d. Istituto*, 1885, p. 182.

**ORVIETO.**—The excavation of archaic tombs at the necropolis of the *Cannicella* has been continued, but without any very important results,

the finds being of a character similar to those of previous excavations.—*Not. d. Scavi*, Dec. 1885, p. 502.

**PERUGIA.**—Excavations have recently been undertaken at two points outside the city. Near the Porta del Bulagaio, were opened some tombs containing Roman objects, some anterior some posterior to the Hannibalic war. Near Monte Vile is a place called, from the numerous Etruscan tombs, *Le Grotte*. A single small *hypogeum* has been discovered intact, on whose tufa bench were found fourteen cinerary urns with short inscriptions showing them to belong to the Vibia family. The tomb seems to belong to the II cent. B. C. Several of the urns have bas-reliefs.—*Not. d. Scavi*, 1885, pp. 497–500.

**PISA** (near).—Under the fortress of Verruca was found a group of objects (*paalstab ad alette*) belonging probably to the pure bronze age; this is of all the more importance for Etruria that it proves the existence of an archaeological stratum no traces of which had been furnished by the cemeteries or isolated tombs of that region.—*Bull. di Paletnologia Ital.* 1885, No. 11–12, p. 192.

**POMPEII.**—The excavations carried on from July to December were in reg. VIII, is. 2; and the most interesting building explored was the so-called *casa di Giuseppe II*, first discovered in 1767 and 1769. Several frescos, mostly in poor condition, were found.—*Not. d. Scavi*, 1885, pp. 532–539.

**QUINTO FIORENTINO.**—*Ancient tomb.*—Under the casino of a villa called *la Mula*, between five and six miles from Florence, exists a very early unique Etruscan tomb, noticed and described by Prof. Helbig. It consists of a circular construction, about 10 met. in diameter, surmounted by a cupola constructed in horizontal strata: out of this leads a corridor. Both are built of huge quadrangular blocks of calcareous stone fitted without cement and without any trace of tools (cf. similar tombs on gulf of Argos and at Menidi in Attika). It belongs to an advanced but somewhat early stage of Etruscan civilization, and is attributed by Helbig to the VI century B. C.—*Bull. d. Istituto*, 1885, pp. 193–199.

**REMEDELLO** (near Reggio d'Emilia).—These excavations have been continued from last year by the Signori Bandieri and Ruzzenenti. Towards the N. were found a group of Gallic tombs: towards the W. another group of 17 tombs of the *eneo-lithic* period.—*Bull. di Paletnologia Ital.* 1885, pp. 133–146.

**RIVA SAN VITALE** (Lake Lugano).—An inscription found here belongs to the class of mortuary foundations ordering periodical *rosalia*. It is thus restored by Prof. Mommsen: *D. M. Caji Romati C. f. . . III viri i(ure) d(ieundo) Como, . . a Martina cum filiis c. k. qui largitus est . . primo Subinatibus [sextert. mille] a quibus petivit ut coitione sua memoriam*

*matris eius per annos colant amaranto vel rosis profundant. Quod si neglexerint facere quadruplum eos heredis heredi. Romati ave.—Berl. phil. Woch. Jan. 30.*

**ROME.**—*Inscriptions.*—The following important inscriptions are published by Lanciani in the *Notizie degli Scavi*:—

1. Of year 219 A. D., on a cippus; *Herculi Magusano | obredium Domini nostri | M. Aureli Antonini Pii | Felicis Aug Equites Singulares | Antoniniani ejus cives | Batavi sive Thraeces adlecti | ex provincia Germania | inferiore votum solverunt | libentes merito III Kal. Oct | imp Dn Antonino Aug II et | Tineio sacerdote II cos.*

2. Of year 241 A. D., on a cippus; on the face, *I O M | Deo Sabadio sacrum | Julius Faustus Dec N | Eq sing Dn ex votum | posuit et conalarium | nomina inseruit | ex ala prima Darda prov Moesia inf.* On the left side, a list of 13 names; on the right side: *Dedicata | IIII Non Aug | Domino N Gordiano Aug | II et Pompeiano cos.*

3. Of year 142 A. D., on a cippus; *Herculi et Genio | Imp. Titi Aeli Hadriani | Antonini Aug Pii P. P. | Veterani missi honesta | missione ex numero equitum | sing. aug. quorum nomina in | lateribus inscripta sunt laeti | libentes posuerunt statuam marm | cum sua basi Quadrato et Rufino cos, etc.* On the right and left sides, a list of 40 names of *equites singulares*.

4. Of year 141 A. D., on a cippus; *Jovi . optimo | maximo . Junoni | Minervae . Marti | Victoriae . Herculi | Fortunae . Mercurio | Felicitati . saluti . fatis | campestribus . Silvano | Apollini . Dianae . eponae | matribus . sulevis et | genio . sing . Aug | ceterisque . Dis . immortalib | veterani . missi | honesta . missione . ex . eodem | numero . ab . Imp . Hadriano | Antonino . Aug . P. P. P. | Priscino . et . Stloga . cōs | L. L. M. V. S.—Not. d. Scavi, Dec. 1885, p. 524.*

Another *Mithræum* has been found, on the site of the church of S. Caio, with traces of a fine fresco representing *Mithras tauroktonos* between the two genii of the solstices. This had been, at an early period, covered up by a similar group in stucco relief.—*Not. d. Scavi*, Dec. 1885, p. 527.

**Horrea Galbae.**—The building—docks or warehouses—of the *Horrea Galbae* has come to light. In plan it is identical with the docks of Ostia and Porto, consisting of a series of rectangular courts surrounded by wide porticos. It begins near the Arco S. Lazaro, and stretches along the plain as far as the foot of Monte Testaccio on one side, and the ruins of the Emporium on the other.—*Athenæum*, Jan. 23.

**Mausoleum of Galba.**—Below the basilica of San Paolo, and near the Emporium, has been discovered the tomb of the founder of the *horrea*, Sergius Sulpicius Galba, son of Sergius, consul in 646 U. C. The tomb is built in the severe style of the Republic (cf. tomb at Palazzuolo attrib. to



Corn. Scipio Hispalus). The inscription reads: *Ser · Sulpicius · Ser · F | Galba · Cos | Ped · Quadr · XXX* (Sergius Sulpicius Sergii filius Galba consul. Pedes quadrati XXX). The basement is built of large blocks of *peperino*, then follows a cornice of *pietra sperone*, upon which rises the rectangular body of the mausoleum built of reddish tufa. It is 20 ft. below the present level, and will be rebuilt in another place, and a square made around it.—*Athenæum*, Jan. 23; *Cour. de l'Art*, Feb. 26.

*Mosaics*.—On the Caelian Hill, where the military hospital is to stand, a discovery has been made of a very large and fine mosaic, measuring 12 by 8 metres. The mosaic seems to belong to the time of the last emperors, and must have formed the pavement of a room in some palace. It closely resembles the mosaic found in the Via Nazionale before the Palazzo Colonna, and now preserved in the Capitol. The design of the recently discovered mosaic is of rose-work surrounded by allegorical figures.—*Cour. de l'Art*, Dec. 4.

Some metres below the surface of the soil, in the Piazza della Cancelleria, during the demolition of the Palazzo Pagnoncelli, a fine mosaic was found, made of different colored marbles, and with designs of geometrical figures and other objects, in a good style. The archaeologists who have seen it, say that it goes back to the first years of the Empire.—*Cour. de l'Art*, Oct. 30 and Nov. 6.

*Terminal Stone*.—In that part of the city which lies between the Aventine and the Tiber (S. Prati del Testaccio) extensive excavations are being made for municipal purposes. Here one of the terminal stones of the sacred area of Rome has been found. The stone—*cippus pomoerii*—belongs to the amplification made by Claudius A. D. 49, as is shown by the inscription.—*Athenæum*, Jan. 23.

**TARQUINII-CORNETO**.—No full account had as yet been given of the excavations carried on here with so much success since 1881. This lack has finally been supplied by a report made by Sig. A. Pasqui and published in the *Notizie degli Scavi*, 1885, Nov.–Dec. It will be necessary here only to add to the report which was given in the *JOURNAL* (vol. i. p. 440) the more recent investigations: our report ended Feb. 1. In March and April a number of tombs were opened which furnished objects of especial interest. They belong to various periods: some are archaic Etruscan, others yielded works of pure Greek style: among these were a large number of painted vases. More important is a memoir by Sig. Pasqui on the site of the ancient Tarquinii, which proves it to be not on the height called *Civita*, as had been supposed, but on the site of the modern Corneto.—Pasqui in *Not. d. Scavi*, 1885, pp. 505–524; Helbig in *Bull. d. Istituto*, Nov. 1885, pp. 209–222.



**TERNI.**—A necropolis of the first iron age has been discovered in the suburbs of Terni, at a place called *Sant' Agnese*. The tombs are for inhumation, and in them were found bronzes of the greatest interest, which are related to those of the well-known find of Piediluco, in the territory of Terni.—*Bull. di Paletnologia Ital.* 1885, p. 174.

**VENICE: ISLAND OF TORCELLO.**—An important discovery of objects belonging to the stone age, made by the director of the Museum of Torcello, Sig. Battaglini, shows this to have been a centre of population at that early period. These objects, over 140 in number, comprise "palchi" and poniards in bone of reindeer, deer and other ruminants; arms; necklaces; amulets; "mazzuoli"; edge-tools; etc.—*Bull. di Paletnologia Ital.* 1885, No. 11-12, pp. 190-191.

**VETULONIA.**—On p. 447 of vol. I of the JOURNAL, the archaic necropolis of the *Poggio della Guardia* was described. Since its discovery, however, another vast necropolis of the same Villanova type has been more thoroughly explored on the hill of Colonna, in an almost opposite direction to the first, of which it seems to be also the immediate continuation in point of time. Already, on p. 447, it had been noticed how, over the entire hill, there were scattered *tumuli* or *cuccumelle*, for burial by inhumation, belonging to the best Etruscan period. The greater number are ranged along a street of tombs to the N., which descends to the marsh of Castiglioni, skirting the necropolis of the *Poggio della Guardia*, towards the plain. This street, however, continues on the opposite side of the hill, towards the river *Aliena* or *Linca*, through a narrow gorge. In their midst, and on the *colle Barancio*, exists the second archaic necropolis, similar in form to the first. The tombs are all for cremation, and are excavated in the rock in the form of wells: they are judged to be posterior to those of the *Poggio della Guardia* on account of the greater accuracy of construction, and the greater abundance and variety of the contents. A notable peculiarity is the superposition of one well over another; but this does not imply separate strata of different ages. Often the tombs were placed so close together that the upright slab which formed one of the walls served also the same purpose for the neighboring tomb.—The *cuccumella del Diavolino* is one of the largest tumuli near Colonna, being 14 met. high, and 260 in circumference: excavations resulted in the discovery, along a line of 18 met., of a horizontal terrace of great slabs of granite in a double row.—Further excavations have been made in the necropolis of *Poggia della Guardia*, without adding anything to what was already known.—*Not. d. Scavi*, 1885, p. 398 sqq.

## CHRISTIAN ANTIQUITIES OF ITALY.

**FLORENCE.**—*Church of Santa Trinità.*—With the consent of the Minister of Public Instruction, Professor Cosimo Conti has made several attempts to uncover the mediæval frescos on the walls of this church. So far Prof. Conti has proved that all the exterior lunettes of the family chapels, as well as numerous portions of the interior of these chapels, had historical, religious, and ornamental decoration.—*Cour. de l'Art*, Dec. 4.

**ROME.**—*Catacomb of Santa Felicità.*—Some years ago Com. de Rossi identified some subterranean excavated under the Vigna Carcano, one mile outside of Rome on the Via Salaria, as the cemetery of Felicità, martyred under Marcus Aurelius. This has just now been confirmed by the discovery of important works: a hall or crypt containing a painting of the VII cent. in Byzantine style representing, above, the half-figure of the Saviour blessing the figures beneath. In the centre is Sta Felicità with a nimbus; on her left are four of her sons (inscriptions *Philippus, Martialis*), and on her right the other three (insc. *Januarius, Silvannus*): all are crowned, and the scene represents their glorification. This crypt opens on the right, about half-way down, of an ancient stairway, on each side of which are the usual rows of loculi and the diverging galleries. An unusually large number of terracotta lamps were found. At the bottom of the staircase was a species of well, surmounted by an arch containing traces of paintings, which seems to have been used by the early Christians for baptism by immersion: such a baptistery is of very rare occurrence in the catacombs. The inscriptions as yet found are not of special importance. Excavations are prevented by the building placed over the cemetery.—Orazio Marucchi in the *Nuova Antologia*, Feb. 1, pp. 409-421.

*Apse of St. John Lateran.*—The new apse is nearly finished, and the solemn opening is to take place on the fête-day of John the Baptist. The frescos and the decoration of the ceiling are being finished. All the old mosaics have been replaced in the new apse.—*Cour. de l'Art*, March 12. [When it was decided, five or six years ago, to lengthen the choir of the basilica and build a new apse, the important mosaics of the V and XIII centuries which filled the old apse, in the semi-dome and between the windows, had to be removed. Before doing this an exact tracing was made of them, cube by cube, and was then colored in fac-simile. This has made the reconstitution of the mosaics a matter of comparative ease to the skilled mosaicists of the *Fabbrica* of St. Peter. Their archæological value, however, has been much diminished, as the different restorations and changes they have undergone can no longer be traced; but it is to be hoped that a careful study of this kind was made before the removal. ED.].

**VANDALISM IN ROME.**—*Ara-Cœli.*—Among the buildings on the Capitol to be destroyed by the preliminary works for the national monument of Victor Emmanuel, are the convent of Ara-Cœli, and the tower of Paul III. The latter building is interesting as one of the few remaining monuments of Rome as it was before the Florentine and barocco schools changed the entire appearance of the city.—*Cour. de l'Art*, Nov. 27.

*Church of S. Stefano sopra Cucco.*—This early church, which preserves its basilical form, consists of three naves supported by fourteen antique columns, and contains a fresco by Pierino del Vaga, is to be destroyed and replaced by a casern.—*Revue de l'Art Chrétien*, 1885, p. 553.

**VENICE.**—The scaffolds have just been removed from the Loggetta di Sansovino, at the foot of the Campanile, in the piazza of San Marco. The restoration of the building has been going on for several years, and has caused fierce criticism. It is said that the work is extremely well done, the ancient fragments being put into place, and the gaps carefully repaired.—*Cour. de l'Art*, Nov. 6.

The paving of the piazza of San Marco having to be renewed, the opportunity has been taken to upturn the soil, in order to discover the original dimensions of the square, and to find, if possible, traces of the walls of the church of San Geminiano, and of the wall built in 900 A. D. to resist the pirates.—*Cour. de l'Art*, Dec. 4.

Last July a hole was dug at the N. W. angle of the campanile, with the object of finding out the materials and construction of the foundations. At the depth of 2 ft. 5 in. an older pavement of "herring-bone" brickwork was found. This is the pavement represented in Gentile Bellini's picture of the square, painted just before 1500 A. D. The campanile, which is of brick, rests on a plinth of stonework, with three offsets or footings, visible above the level of the present piazza. Two other offsets are hidden between the present and the old pavement. Below this once-visible plinth are seven courses of massive stone blocks, finishing at the bottom with a course nearly 3 ft. thick, which rests on a double layer of stout oak planks, laid crosswise. This oaken floor rests on a mass of closely driven piles, formed of posts only about eight inches in diameter, not of oak, but of the soft white poplar which grows near the Venetian lagunes. The area of the wooden platform is only a few inches larger than that of the stone base of the campanile, and depends for its solidity on the extreme density of the clay into which the piles are driven.

Signor Giacomo Boni, who has charge of the works, says that at an early period the Venetians used local woods, but, later on, the fine conifers from the lower Alps came into use. The foundations of the Doge's palace, built in the xiv cent., rest on a double layer of red-larch-wood from Cadore. It is noticeable that the foundation of the Doge's palace

does not rest on piles, but the weight of the building is distributed by projecting footings.—*Academy*, Nov. 7.

Mr. C. H. Blackall, who made the above examination, published the results of his work, in detail and with illustrations, in the *American Architect*, vol. XVIII. No 505, pp. 101-2.

#### FRANCE.

**ANTIBES.**—*Cathedral.*—M. Félon, while restoring a chapel, rediscovered a series of frescos representing, in seventeen compartments, the Life of Christ. On the principal composition, which is a masterpiece, he found the date 1315. The others of greatest merit are the Garden of Olives, the Bearing of the Cross, the Ascension, Pentecost, the Assumption, and Calvary. They appear to be the work of some Italian master and his pupils, as the execution is unequal.—*Revue de l'Art Chrétien*, 1885, p. 554.

**ARTRES.**—*Merovingian Jewelry.*—At the sitting of the *Acad. des Insc. et Belles-Lettres* held Jan. 29, M. Ch. Robert described the contents of a Merovingian tomb of a woman, composed of vases, objects for the toilet, and jewelry, of which the latter only were preserved. They are among the most curious specimens of the kind of jewelry which the Franks and Goths did not borrow from the Romans, and which was probably of Oriental origin.—*Temps*, Feb. 1.

**MOINT (Loire).**—A treasure of Roman objects has been found in a vase. It includes 1285 coins of the reign of Trajan, lamps, rings, and other precious objects. Remains of ancient substructures have also been discovered on the site. See the report of M. Robert at the sitting of the *Acad. des Insc. et Belles-Lettres* on Feb. 19.—*Cour. de l'Art*, Feb. 26.

**PARIS.**—*Amphitheatre.*—Some time since, a portion of ground at the corner of the Rue Monge and the Rue Navarre was purchased by the Paris municipality, as this site was known to be above a part of the ancient amphitheatre of Lutetia. Excavations have thus far disclosed an arena girt by a *podium* about 2 met. high, from which rise the usual tiers of seats. Within the *podium*, and concentric therewith, are traces of a second, low but very thick, wall, which may have enabled the circus to be used for sea-fights. Among the débris are portions of seats on which are inscribed the names of personages for whom they were reserved. It is expected that the land which covers the rest of the ruin will also be bought.—*Athenæum*, Jan. 16.

**Cluny Museum.**—One of the inner courts of the Museum has been transformed into an exhibition-hall by the addition of a glass roof. The works to be exhibited are already being arranged, and the hall will be open in June.—*Cour. de l'Art*, Feb. 19.

## BELGIUM.

**MALDEGEM** (near) (East Flanders).—The *Messenger des sciences historiques* announces the discovery, during excavations made to find the ruins of the Abbey of Zoetendaale (destroyed in XVI cent.), of the foundations of an early mediæval castle (27 by 12 met.). At one corner was a triangular tower, a very rare feature in the military architecture of Belgium.—*Bull. Monumental*, 1885, p. 545.

**TOURNAI**.—*Cathedral church of St. Nicholas*.—See vol. I. p. 456 of the JOURNAL. The restoration is being continued, and has brought to light, among other things, (1) a sculptured sepulchral slab of 1380, (2) a sculptured relief of Baudouin d'Hainin (†1420), and (3) a polychromatic relief of the entire family of Arnould de Gueldres at the feet of the Virgin, dating from 1560.—*Revue de l'Art Chrétien*, 1885, p. 553.

## GERMANY.

*Roman remains*.—In digging the canal along the Main, remains have been found of Roman bridges near Gross-Crotzenburg and Nied. Also, a Roman grave near Niederrad.—*Berl. phil. Woch.* Jan. 9.

**ABUSINA**.—See vol. I. p. 247 of JOURNAL. Extensive excavation by the Rev. W. Schreiner, the happy discoverer of this great Roman fortress at Eining on the Danube, has laid bare, not only the military works and buildings, but also over seventy large civil structures situated between the northern and southern *Castra*. The fine fortifications of the southern camp, its walled escarp and towers, its praetorium and gates, the double circle of forts around the town, justify Mr. Schreiner's opinion that Abusina was the Paris of Roman South-East Germany. It was thrice taken, but always rebuilt. The county of Lower Bavaria has undertaken to preserve the ruins, and, wherever necessary, has acquired the sites on which they stand. The collections resulting from the discovery embrace some 2500 specimens,—pottery; bone-carvings; armor; and ornaments in bronze, silver, gold, and precious stones.—*Munich Fremdenblatt*, Nov. 15.

**BONN**.—In the Roman *Castrum* has been found a beautiful bronze statuette, of the best period of Roman art, representing a winged Victory standing on the globe. It has been purchased by Prof. Aus'm Weerth.—*Berl. phil. Woch.* Jan. 30.

**CAMPDUNUM**.—The identity of Kempten, Bavaria, with this Kelto-Roman town is accepted. The exact situation of the *castrum* was not known before the discovery, last summer, of a group of ruins 64 by 125 metres. The bricks bear no legionary stamp. The southern half of the group consists of a great hall (27 by 16 m.) flanked by smaller rooms. Its semi-circular projection suggests the basilica. The central hall in the

northern portion has a rectangular projection, and is flanked by larger apartments. A suite of fourteen chambers runs along the western side of the whole edifice, which may have been a praetorial residence.—*Allgemeine Zeitung*, Oct. 26.

**TURKEY.**

**CONSTANTINOPLE.**—The Trojan pottery and other treasures in the museum of Constantinople have been bought from the Turkish government for Dr. Schliemann, who proposes to present them to the Schliemann museum in Berlin.—*Berl. phil. Woch.* Nov. 14.

**RUSSIA.**

**KIEW.**—A prehistoric tomb belonging to the cut-stone age has been found near Gloubotphigu. The Russian archaeologists, professors Feofeltow and Kiboltchitch, intend to report on it to the Society of Naturalists.—*Cour. de l'Art*, Feb. 5.

**GREAT BRITAIN.**

**ENGLAND.**—Mr. A. S. MURRAY has succeeded Prof. C. T. Newton as Director of Greek and Roman antiquities at the British Museum. The directorship of Oriental antiquities, vacated a short time ago by the death of Mr. S. Birch, has been given to M. LE PAGE RENOUF. Mr. Sidney Colvin has resigned the Slade professorship, and Mr. I. H. MIDDLTON has been elected in his place.—*Berl. phil. Woch.* Feb. 27.

PROF. C. T. NEWTON is delivering during the current term at University College (London) two courses of lectures: (1) on "Greek Inscriptions," with Dittenberger's *Sylloge Insc. Graec.* and Hick's *Man. of Greek Inscr.* for his text-books; and (2) on "Greek myths illustrated by fictile vases and other monuments." These lectures began on January 8, and are bi-monthly.—*Academy*, Jan. 9.

**DEERHURST.**—*Saxon Chapel.*—At a short distance from the well-known Saxon parish church, an ancient chapel has been found. The outline of the walls has been traced, and the building found to have a small nave and chancel of very early work. A dedication-stone of the altar to the Holy Trinity has been found, and Mr. Birch, who announced the discovery at a meeting of the British Archaeological Association, points out the resemblance to the inscription in the Ashmolean Museum recording the dedication of a church at Deerhurst by Earl Odda in 1056.—*Athenaeum*, Nov. 28.

**WHITLEY CASTLE AND SOUTH SHIELDS.**—*Roman Inscriptions.*—Mr. W. Thompson Watkin reports the discovery of two Roman inscriptions. The first was found at the Roman station of Whitley Castle, near Alston.



Only the right-hand lower corner of the tablet remains. On it is the following:

°S III VI | O · LEG · | S · PR · BR ·

Mr. Watkin fills out the inscription as follows: *co(n)s(ul) III. Vi(rio) (Lup)o Leg(ato) Aug(usti) co(n)s(ulari) Pr(ovinciae) Br(itanniae)*. *Sub* must be understood before *Virio*. The third consulate of Septimius Severus was A. D. 202; and, as he was never consul a fourth time, the numeral *III* followed the abbreviation *cos* in all inscriptions in which his name occurred after that date, and in which his consulships are mentioned. Virius Lupus was legate in Britain, as we know from other sources, in 197 A. D.; but we find L. Alfenius Senecio holding that title in 205 A. D. Mr. Watkin thinks that from this inscription it may be gathered that Lupus was in the island from 197 to at least 202.

The other inscription was on a small altar, 2 ft. 3 in. high, found at South Shields [discovered during sewerage operations on the site of the Roman *castrum*, and just within the eastern rampart.—*Athenæum*, Oct. 24]. It is inscribed on the front:

D · ESCVLAP · | P · VIBOLEIVS | SECVNDVS | ARAM | D · D ·

There is a *præfericulum* sculptured on the right side, and on the left a *patera*. The expansion is *D(eo) Esculap(io)*. *P(ublius) Viboleius Secundus, Aram D(onum) D(at)*. It is the fifth dedication to Aesculapius found in Britain, so far as is recorded.—*Academy*, Nov. 7.

## AMERICA.

### UNITED STATES.

**CINCINNATI.**—*Museum and Art-School*.—In 1880, Mr. Ch. W. West offered \$150,000 for the erection of a Museum, and this sum was increased to \$316,000 by public subscription. The building was commenced in 1882, and is now completed: it will be opened in the Spring. It has an income of \$10,500 from a further donation of \$150,000 from Mr. West. An Art-School will soon be erected in connection with the Museum: Mr. Sinton and Mr. Springer have given \$95,000 for the building, and Mr. Longworth has left \$371,000, the income of which, about \$15,000, will be devoted to its support.—*Amer. Architect*, Jan. 9.

**WASHINGTON.**—*National Museum*.—A notable event in the history of the Museum is the opening to the public of the hall of Aboriginal-American pottery. The collection is unsurpassed in the number and beauty of its specimens. It embraces upwards of 20,000 pieces, about one-half of which will be placed on exhibition. The great wall-case,



nine feet in height and with a total length of two hundred feet, is devoted to the handsome wares of the modern Pueblo Indians. A central case, of the same height and twelve feet square, contains the ancient Pueblo series, chronologically arranged. Beginning with the most archaic form on the lower tier of shelves, we ascend through the three succeeding groups to the earlier historic forms at the top. The remaining floor-space will accommodate about forty of the standard Museum cases, a number of which are now completed. These cases will contain selected series of the various groups of ancient ware. The Mississippi valley, Mexico, Costa Rica, Chèriqui, Peru, and Brazil, are exceptionally well represented. The Curator, W. H. Holmes, is engaged on the preparation of an exhaustive work upon native American ceramics, for which upwards of one thousand engravings are already made.

The fine series of models of ancient Pueblo ruins prepared for the New Orleans exhibition by the Bureau of Ethnology is now placed in the hall of Mexican antiquities, where it forms a most attractive and instructive feature.

*Bureau of Ethnology.*—A valuable collection of relics from a mound in Eastern Tennessee has recently been acquired by Dr. Thomas' section of the Bureau. Most interesting are a number of engraved shell gorgets. The designs are similar in type to those published in the *Second Annual Report* of the Bureau, but exhibit new features in the treatment of birds and of bird-men. The conception and execution of the figures is so superior as to awaken the suspicion that they were made by the ancient Mexicans or by early European traders in imitation of native work, but there is no feature in the designs themselves to give support to such an hypothesis.

*Dr. Washington Matthews' studies of the mythologic sand-paintings of the Navajoes*, are among the most novel and important contributions recently made to our knowledge of aboriginal art. Much additional matter was obtained during the fall months by Mr. and Mrs. James Stevenson, who were given free access to the nine-days' ceremonies of the *ye-bi-chai* dance, a favor never before accorded to strangers. The numerous duties of the Navajo pantheon with all their symbols and paraphernalia are delineated, and with great skill, in brilliantly colored sands upon the floors of the sacred enclosures. [*Communicated by W. H. Holmes.*]

#### CANADA.

*Manitoba Mounds.*—The exploration of the ancient mounds in Manitoba promises interesting results. It appears, from surveys made during the past summer, that the northern limits of the mound-builders lie

beyond the Red River of the North. Along this river and Lake Winnipeg, mounds were found identical in structure with the famous ones of the Ohio and Mississippi valleys.—*Science*, Feb. 26.

#### MEXICO.

Former visitors to the City of Mexico and archæologists will be glad to know that the great Calendar-stone has been removed from the site it occupied for the period of 95 years, against the west wall of the Cathedral, and is now under shelter in the large new hall on the ground-floor of the National Museum. The monoliths commonly known as the "Sacrificial Stone" and the goddess "Teoyasmiqui" have been taken from the open courtyard of the building and also placed in the hall. From Mazatlan comes the news that the publication of *Los Aztecas* by the Rev. Pbro. Dámas. Sotomayor is suspended on account of certain difficulties in having the plates for illustration made there. The printing of the text, however, is in active progress. [*Communicated by Mrs. Z. Nuttall from private correspondence.*]

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A. R. MARSH.

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## SUMMARIES OF PERIODICALS.

**ARCHÄOLOGISCHE ZEITUNG.** 1885. No. 3.—1. FR. MARX, *A new Ares-myth.* By comparison of a cista from Palestrina (*Mon. dell' Inst.* ix. tav. LVIII; *Annali*, 1873, p. 221 seqq.) with two Etruscan mirrors (Gerhard, *Etr. Spiegel* II. taf. CLXVI and III. 2, taf. CCLVII, B), it is shown that a myth existed which made Ares the son of Athena and a mortal. According to one version (that of the mirrors) she gave birth to triplets (hence Tritogeneia?), according to another to Ares alone. To make him immortal she anointed him with ambrosia, and dipped him in the water of the Styx, which was brought in a large vase. This bath is represented on the monuments discussed. The analogy of the myth of Achilles is evident.—2. P. J. MEIER, *Contributions to the List of Greek Vases with Artists' Signatures* (pls. 10, 11). Cf. *Arch. Ztg.* 1884, p. 237. To the vases with the inscription *Λεαγρος καλός* (Klein, *Meistersignaturen*, p. 57) is added (9 b) one from Orvieto, in the collection Bourguignon at Naples (pl. 10). A naked satyr is represented in red upon a black ground. We read the inscriptions, *Ἀθηνόδοτος καλός*, *Λεαγρος καλός*, and a third *καλός*. The work is ascribed to Euphronios (Klein, p. 59), as is also vase No. 515 of the Munich collection (pl. 11), which is ornamented with scenes from the palaestra, in red upon a black ground. This vase bears the inscription *ὁ παῖς καλός* twice, *Ναίει καλός* once. The letters on both these vases are, of course, of the Attic alphabet.—3. F. WINTER, *Vases with Outline Drawings* (pl. 12). On plate 12 are published the paintings from (1) a vase in Bonn, (2) a vase in the British Museum, formerly No. 392 of the Hamilton collection, (3) a marble stele in Berlin (Conze, *Verzeichniss der antiken Sculpturen*, 734). As cuts in the text, three heads are published from vases in the British Museum. By comparison of these drawings and others which are mentioned, it is shown that the transition from the vases with black figures to those with red figures was effected in part by an intermediate stage in which drawings were made in outline. These drawings were mostly mere heads, and are found mainly upon shallow dishes (as well as upon white lekythoi). The passage in Pliny (N. H. xxxv. 56) about Kimon of Kleonai is discussed.—4. W. M. RAMSAY, *Bas-relief of Ibriz* (pl. 13). A more accurate publication and description is given of a bas-relief at Ibriz in the Taurus mountains, already published in Ritter's *Kleinasien*, vol. I.

pl. 3; and in Davis' *Life in Asiatic Turkey*, p. 252. The relief is of the class commonly called Hittite. It represents a priest worshipping the god of nature. Beside the figures are hieroglyphs.—5. K. WERNICKE, *Life of a Child in representations on sarcophagi* (pl. 14). Reliefs from two sarcophagi in the Louvre are published (Fröhner No. 397 = Museo Campana No. 324, and the sarcophagus of M. Cornelius Statius). With these seventeen other reliefs are compared, and the development of the scenes depicted upon them is explained.—6. A. FURTWÄGLER, *Prometheus*. An intaglio upon a scarabæus in Odessa represents Hephaistos chaining Prometheus to the rock. This is published as a vignette heading the text. Its relation to other representations of Prometheus bound is discussed.—7. MISCELLANIES. K. WERNICKE, *The Childhood of Zeus*. Cuts are given of the ends of a sarcophagus in the Uffizi (Dütschke, III. 377). The reliefs are said to represent the childhood of Zeus, and this interpretation is supported by mention of other similar representations.—A. MICHAELIS, *Theseus or Jason?* In opposition to Purgold (*Bullettino*, 1879, p. 76; *Arch. Ztg.* 1883, p. 163), Robert (*Arch. Ztg.* 1883, p. 261), and Lehnerdt (*Arch. Ztg.* 1884, p. 117), Michaelis maintains that he was right (*Arch. Ztg.* 1877, p. 75), in explaining the painting of a vase in St. Petersburg (No. 2012; *Antiq. du Bosph. Cimm.* pl. 63 a, 2) as Theseus contending with the Marathonian bull in presence of Medea.—8. REPORTS. *Acquisitions of the British Museum in the year 1884.* H. N. FOWLER.

**BULLETTINO DI ARCHEOLOGIA CRISTIANA.** Rome, 1884-5. Nos. 2, 3.—G. B. DE ROSSI, *Recent Explorations on the lower level of the cemetery of Priscilla*. In 1880 (*Bull.* pp. 5-54) the writer demonstrated that the principal crypts of the cemetery were, to all appearance, on two levels; the more ancient, on the upper one, the more recent (contemp. w. Diocletian), on the lower. The lower story, in which the excavations were made last winter, is constructed, with extraordinary regularity, of a network of many parallel galleries intersecting, at right angles, a very long central ambulacrum which is sustained at regular intervals by a series of arches. Boldetti visited this part of the cemetery, and published fifteen inscriptions found there. De Rossi publishes 21, which he considers earlier than the IV century. A comparative study of the inscriptions of the upper story, belonging to the earliest period of Christianity in Rome, and those of the lower story, will yield most important chronological results. A fragment found completes the following important funeral epitaph of Agape, anterior to the IV century: *Dixit et hoc Pater omnipotens cum (pelleret Adam) | De terra sumptus terrae traderis hu(mandus). | Sic nobis sita filia e(s)t Agape Christ(umque secuta?) | Bis denos septemque annos eme(n)sa (resurget): | Haec illi per Christum fuerat sic (plena*

*senectus*).—*Eucharis est mater, Pius et pater est (mi). | Vos precor o fratres, orare huc quando veni(tis) | Et precibus totis Patrem Natunque rogatis, | Sit vestrae mentis Agapes carae meminisse, | Ut Deus omnipotens Agapen in saecula servet.* A chapter is devoted to the use of the name Petrus in the early inscriptions of this catacomb.—*Fragment of a glass adorned with biblical scenes in intaglio* (pl. v-vi). This was found in 1884 on the Esquiline (Cf. Lanciani, in *Not. d. Scavi*, 1884, p. 220; and *Bull. Arch. Com.* 1884, p. 272). The subjects appear to be (1) the sacrifice of Isaac, (2) Daniel between the lions, (3) the Israelites guided by the cloud. This rare kind of work in glass has been lately several times illustrated (De Rossi, *Bull.* 1868, p. 36; 1873, 141; 1874, 153; 1876, 1; 1878, 147. H. de Villefosse, *Rev. Arch.* 1874, pp. 281-289. Especially the dissertation by Padre L. Bruzza, *Bull. Arch. Com.* 1882, pp. 180-190).—*Christian Sepulchral inscriptions recently discovered in Capua* (pl. iv). Of interest is the following epitaph: *(h)ic requiescit Sucessa c(larissimae) m(emoriae) f(emina) (i)n somno pacis cum (s)i(g)no fidei quae vixit ann(os) (plus) m(inus) LXXVII d(e)posita die XVII Kal . . . .* The formula "*eum signo fidei*" is unique.—*The bishop Augustine and his mother Felicitas, martyrs under Decius, and their records and monuments in Capua.* This paper deals mainly with the interesting mosaics of the apse and cupola of the church of S. Prisco at Capua, which were destroyed in 1766, but of which some drawings remain (Monaco, *Sanctuarium Capuanum*, 1630, p. 1321; Granata, *St. d. Chiesa di Capua*, II. p. 67; and esp. Garrucci, *St. dell' Arte Crist.*, tav. 256, 257). The personages portrayed in them, De Rossi shows to have been, not, as Garrucci thought, victims of the Vandal persecution in the v century, but early martyrs venerated by the Church in Capua, whose bodies doubtless rested in the cemetery of S. Prisco, and who were honored in the basilica erected afterwards on the site. The writer considers that the characteristics of the mosaic agree better with the v than with the vi century.

A. L. F., JR.

**BULLETTINO DELLA COMMISSIONE ARCHEOLOGICA COMUNALE DI ROMA.** 1885. No. 2, Apr.-June.—W. HENZEN, *An inscription found near Monte Testaccio* (pl. vi). Erected by a *collegium salutare* of persons belonging to the imperial household and living in the *predi Galbani*, which appear to have been imperial property.—G. B. DE ROSSI, *Fragment of a glass adorned with biblical scenes in intaglio* (pl. VII. VIII). See, above, the analysis of *Bull. di Arch. Crist.*—D. GNOLI, *On some unknown or little-known topographical plans of Rome* (pls. ix-xv). The writer is forming in the National Library a collection of plans of Rome, which already amount to over 150. He here publishes some of the earliest and rarest: that by Leon Battista Alberti, the first printed plan

(1490); that of Münter's *Cosmografia Universale*; and finally a part of the great plan made under Paul V, and forming an album of 48 sheets.—C. L. VISCONTI, *A plan of Rome in the XIV century published by M. Eugène Müntz* (pl. XVI). See analysis of M. Müntz's article, *JOURNAL*, I. p. 473. The writer identifies a number of buildings on this plan.

**No. 3, July-Sept.**—L. BORSARI, *Topographical observations on the IX Region, CIRCVS FLAMINIUS* (pl. XVII). The writer seeks to demonstrate that the IX region as understood by present authorities is too much confined, and that, "besides extending itself further to the N., i. e. up to the Piazza del Popolo, it must also have reached out on the right, thus finding certain and natural limits in the slopes of the Pincian hill, as it had on the South in those of the Capitoline and Quirinal.—R. LANCIANI, *Supplement to the VI volume of the Corpus Inscriptionum Latinarum*.—G. GATTI, *A fragment of inscription containing the Lex horreorum* (pl. XVIII). Only the right half of this important monument remains: the writer attributes it to the Emp. Hadrian, and reads it as follows, with a tentative restoration:

in · HORREIS | imp · hadriani · CAESARIS · AVG · LOC |  
cellae · frumentar · et · uinAR · ARMARIA · ET · LOCA |  
cum · operis · cellARAR · EX · HAC · DIE · ET · EX · | idib ·  
dec · primis · LEX HORREORVM

quisquis in his horreis conductum habet cellam armarium aliudVE · QVID ·  
ANTE · IDVS · DEC · PENSIONE · SOLVTA · RENVTIET · QVI · NON · | renuntiauerit  
et cum horreario de renouanda locatione pro inSEQVENTE · ANNO · NON ·  
TRANSEGERIT · TANTI · HABEBIT · QVANTI · EIVS · GENER · | res eo anno in his  
horreis locari solent si modo alii locatum NON · ERIT · QVISQVIS · IN · HIS ·  
HORREIS · CONDVCTVM · HABET · ELOCANDI · ET · | utendum dandi ius non  
habet si elocauerit uel utendum dederit ei eUSTODIA · NON · PRAESTABI-  
TUR QVAE · IN · HIS · HORREIS · INVECTA · INLATA | importata fuerint hor-  
reario pignori erunt pro pensionibus de quibVS · SATIS · EI · fact · non · fue-  
RIT · QVISQVIS · IN · HIS · HORREIS · CONDVCTVM · HABET · ET · SVA | impen-  
sa refecer · ornaver · tollendi quod adiecit ius non habebit nisi ei data  
FVER · VENIA QVISQVIS · IN · HIS · HORREIS · CONDVCT · HABET · PENSIONE ·  
SOLVTA · CHIROGR · | horrearii sibi dari curet et res inlatas offerat si post  
impletum conductionis annum · HORREVM · SVASQ · res · RELIQUER · ET · CVS-  
TODI · NON · ADSIGNAVER · HORREARIVS · SINE · CVLPA · ERIT ·

This is an important document for an acquaintance with the system of public granaries in imperial times.—R. BUTI, *On some Subterranean discovered in the Gardens of Sallust* (pl. XIX-XXI).

A. L. F., JR.



**BULLETIN DE CORRESPONDANCE HELLÉNIQUE.** Athens and Paris, 1885. **May-Nov.**—G. COUSIN and F. DURRBACH, *Inscriptions from Nemea*. Noteworthy, among the inscriptions found, are documents showing (1) the survival, in the III century B. C., of the ancient Argive tribes Hylleis, Dymanes, Pamphyloi, and Hyrnathioi; (2) the existence of a popular assembly called *haliaia* in a Dorian state; (3) the Doric form of the acc. plur. (τῶν ἐνβάτων) now become familiar through the code of Gortyna.—B. HAUSSOULLER, *An inscription from Thebes*. A list of farmers of public and temple lands.—E. POTTIER, *Excavations in the Akropolis of Myrina conducted by M. A. Veyries*. 1. *Dancing satyr carrying the infant Dionysos* (pls. x, xiii). During his short administration of the excavations at Myrina, broken off by his early death at Smyrna in December 1882, V. had the satisfaction of unearthing a series of remarkable terracottas. The style of the group reproduced greatly resembles that of the little bronze satyr recently found at Pergamon, and now in Berlin. It appears, indeed, to be itself a retouched moulding from a bronze, very probably a Pergamene original of the same III century.—E. EGGER, *Inscription from the island of Leuke*. The first found in the island.—S. REINACH, *Servius Cornelius Lentulus, praetor pro consule at Delos*. Historical elucidation of an inscription of 169 B. C.—P. FOUCART, *Inscriptions from Asia Minor*.—P. FOUCART, *Inscriptions from Boiotia*.—G. RADET and P. PARIS, *Two new provincial governors*.—CH. DIEHL and G. COUSIN, *Senatus consultum from Lagina, of 81 B. C.* Found on stones from the wall of the temple of Hekate: a decree rendered in behalf and at request of Stratonikeia, in Karia, and preceded by a letter from L. Cornelius Sulla to that city. It is full of the Latinisms common in the Greek versions of such decrees, which are official translations made at Rome, according to the probable conjecture of Foucart and Mommsen.—M. HOLLEAUX, *Excavation of the Temple of Apollon Ptoos*. First report of discoveries at Akraiphia in Boiotia: sufficient remains of the temple for theoretical restoration; a marble statue much resembling the Apollon of Tenea at Munich; sundry other fragments of archaic sculpture; twenty-three inscriptions, of which twelve in the Boiotian dialect; broken vases and terracottas in large numbers.—REVIEWS: Haussoullier's *Municipal life of Attica*, and Dubois' *Aitolian and Achaian leagues*.

**Dec.**—E. POTTIER and S. REINACH, *Excavations in the necropolis of Myrina: elephant trampling a Gaul* (pl. xi). Of mediocre execution, but of interest as possibly the only antique terracotta that commemorates an historical event; unless we except a naked Gaul with sword and shield found at Myrina itself. War-elephants played a decisive part in the victories of the kings of Syria and Pergamon over the Gaul in the III and II centuries B. C. This little elephant, then, is to be classed with so



famous works, of similar origin and intention, as the Apollon of the Belvedere, the dying Gaul of the Capitol, and the altar-frieze of Pergamon.—J. MARTHA, *Inscriptions from Naxos*. Two very ancient ones in *boustrophedon* writing.—M. CLERC, *Excavations at the Heraion in Samos*. Part of the great temple, some remains of a primitive sanctuary underneath its foundations, and some remains of a small structure near by, were laid bare. From the soil under the pavement of the large temple was extracted a broken bas-relief of tufa that must have belonged to the old temple of Hera; the subject is a man with a sword. Three vase-handles in the form of griffons' heads proved the most interesting among the bronzes unearthed.—F. DURRBACH, *Inscriptions from the Peloponnesos*.—M. HOLLEAUX, *Excavations about the temple of Apollon Ptoos*. The work was resumed in October 1885 by the cutting of trenches below the sanctuary, which stood on a hill; this resulted in the discovery of numerous marbles and bronzes of early style representing both men and beasts, besides vases and inscriptions.—REVIEWS: Hauvette-Besnault, *The Athenian strategoi*.  
ALFRED EMERSON.

ΕΦΗΜΕΡΙΣ ΑΡΧΑΙΟΛΟΓΙΚΗ. JOURNAL OF THE ARCHÆOLOGICAL SOCIETY IN ATHENS. 1885. No. 1.—P. KABBADIAS, *Inscriptions from Epidauros*. The first of these inscriptions (No. 80) is a continuation of the one published in 1883 (*Ep. Αρχ.* p. 197-228). It contains a list of 23 cures effected by the Epidaurian Asklepios, 15 having been performed upon men, and 8 upon women. No. 81 was on the base of a statue of Lykortas son of Theoridas set up by the city of the Lakedaimonians. No. 82 was on the base of a statue of *Tiberius Claudius Nero, Consul*, set up by the city of the Epidaurians. No. 83, also on the base of a statue, states that Archo daughter of Astylaidas consecrated to Apollon and Asklepios a statue of her mother Echekrateia daughter of Damokles.—CHR. D. TSOUNTAS, *Prehistoric Graves in Greece*. The author attempts to prove that the circular tombs (*θολωτοὶ τάφοι*), formerly called treasuries, are a survival of the original form of the Greek dwelling. To this end comparisons are drawn with the tombs found in Scandinavia and elsewhere in Northern Europe, and with the tombs of Hektor and Patroklos described in the *Iliad*. The *θόλος* mentioned in the *Odyssey* (x. 442, 459, 466) as connected with the palace of Odysseus is also cited. By means of an examination of the covering of earth under which the graves in the Akropolis of Mykenai were found, it is shown that these graves were originally covered by a tomb. The circular double wall, which Schliemann has called the wall of the *agora*, is maintained to be the *krepidoma* of this tomb. The article closes with a short discussion on the position of the bodies in the graves, and on cre-

mation.—P. KABBADIAS, *Sculptures from the Excavations at Epidauros* (pls. 1, 2; figures 1–12). I. *Sculptures from the pediments of the temple of Asklepios*. 1. *Torso of a nude warrior* (fig. 1). This appears to be a part of the Amazonomachia from the western pediment of the temple (cf. 'Eφ. 'Apx. 1884, p. 50 sqq.). 2. *Head of an amazon* (fig. 2). Found in a wall between the *tholos* of Polykleitos and the temple of Asklepios, at the beginning of the excavations (cf. 'Aθήνων I. p. 549, No. 2; and 'Eφ. 'Apx. 1884, p. 57, No. 12). Referred to the same group as the torso. II. *Akroteria from the temple of Asklepios*. Three small statues of Nike. One (figs. 3, 3a) is nearly entire. It lacks the right hand, the left arm nearly from the shoulder, and the right foot. The shoulders and neck have holes for the fastening of the wings, which were probably of bronze. The figure is clothed with the *σχιστός χιτῶν*, leaving the right leg bare. The garment is fastened only on the left shoulder, so that the right arm and breast are exposed. The goddess is represented at the moment when she alights upon the earth. The other two figures are somewhat less well preserved, both heads being gone, as well as the arms. Fig. 4 is of the same size as fig. 3, and differs from it only in having the left leg advanced, instead of the right leg as in fig. 3. The third figure (fig. 5) is somewhat larger than the other two, and is therefore supposed to have occupied the place over the middle of the pediment. A head (fig. 5a) has been found, the dimensions and workmanship of which make it probable that it belonged to this last figure. These statues must have stood upon the temple of Asklepios, as the temple of Artemis, to which they might otherwise be ascribed, appears to have had no sculptural adornment. The figures appear to belong to the fourth century B. C. III. *Copy of the chryselephantine statue in the temple* (cf. Paus. II. 27, 2). Asklepios seated upon a throne, sculptured in very high relief upon a block of marble (fig. 6). This block was apparently once placed upon a base, and also fastened to a wall behind. IV. *Three statues of Asklepios standing* (figs. 7–9). These were probably votive offerings. The two smaller ones are of good workmanship, though late, and are ascribed to the age of the Antonines. The third is of inferior workmanship. V. *Two statues of youths* (figs. 10, 11). One of these lacks both legs below the knee, the right arm below the elbow, and almost the whole of the left arm. The head and face are badly mutilated. The other figure lacks the head, both arms, and both legs from the knee downward. The workmanship is said to be good. VI. *Hekate Trimorphos* (figs. 12, 12a). Three figures stand around a column which has a deep hole in it to receive a votive offering. The base on which the figures stand bears the inscription, 'Αρτέμιδι Εκάτη ἐπηκόω Φάβουλλος. Two of the figures are alike, each holding an apple (?) to her breast with one hand, while the other hand

hangs down and touches the himation. The third figure lets both hands hang down, and holds in one a corner of her himation, in the other a *φιάλη* or similar object. The head of each figure is surmounted by a high *kalathos*.—CHR. D. TSOUNTAS, *Athenian Vase-makers* (pl. 3). Publication of a plaque, from the Akropolis, with black figures on a red ground and the inscription [ ]ο Σκόθης ἔγραψεν. Also a *kylix*, found at Korinth but of Athenian manufacture, with red figures on a black ground and the inscription, *Εὐεργίδης ἐ.* Moreover, two inscriptions from fragments of pottery found on the Akropolis, *Δῶρις ἐ* and *Ητ. ρον: ἐποίησε.*—MISCELLANIES. N. NOBOSADSKÉ, *A decree of proxeny from Argos*. The inscription is published.—I. PANTAZIDES, *Περὶ τοῦ Ὑπερτελέατου*. Hyper-teleatas as epithet of Apollon is derived from the name of a place, probably *Ὑπερτέλεια*. Paus. III. 22, 10; the reading *ὕπερτελέατον* is emended to *ὕπερτελέατου* (sc. *Ἀπόλλωνος*).—D. PHILIOS, *The theatre near Zea in the Peiraieus*. A correction of certain statements of M. Dragatsēs (*Εφ. Ἀρχ.* 1884, p. 196), concerning details of the construction of the theatre.—S. A. KOUMANOUDES, *A record of the Pyloroi of the Akropolis at Athens*. An inscription similar to those published C. I. A. III. 1284–1294. The date assigned is "Roman times after Christ." The archon Chrysippos appears here for the first time.

NO. 2.—P. KABBADIAS, *Inscriptions from Epidaurus*. The first of these (No. 84) is a metrical inscription containing a paean to Apollon and Asklepios, with an introduction and an epilogue in hexameters: the paean is in Bacchiac or Ionic metre. The epilogue contains the genealogy of Asklepios, as follows: (1) Zeus, (2) Erato and Malos, (3) Kleopheme and Phlegyas, (3) Aigle (Koronis) and Apollon, (4) Asklepios. The poet, named Isyllos, was hitherto unknown. No. 85 was inscribed upon an altar. It reads, *Ἀσκληπίωι Σωτήρι*. No. 86 was on the base of a votive offering set up by Agrippa in honor of Asklepios. Both these inscriptions are of late date. No. 87 is a fragment of a list of cures like those formerly published (*Εφ. Ἀρχ.* 1883, p. 197, 1885, p. 1).—J. CH. DRAGATSES, *Antiquities of the Peiraieus*. In making a road near the eastern shore of the harbor of Zea, the workmen found remains of buildings. Near these buildings several inscriptions were found. 1. A stele set up by Euthydemus of Eleusis, with directions for sacrifices. The same stele bears three other short inscriptions of somewhat later date. 2. A fragment of a relief with the legend *Ἐρμῆος Διὶ Φ. λίφ.* 3. A few fragmentary reliefs and inscriptions indicating that a temple of Asklepios was in this neighborhood. These are described only from memory, as they have disappeared (but cf. *Εφ. Ἀρχ.* 1884, p. 219). 4. In dredging the harbor of the Peiraieus there were found: *a*, a sepulchral relief representing a woman; *b*, a fragmentary urn with a relief representing a woman and

a bearded man; e, a quadrangular base with the inscription *Δημήτριος Κόχνου Ἀναγλώσττιος*; d, a fragmentary urn with a relief representing a woman (*Πεισιπράτεια*) and a man (*Θεοχάρης Σουντιός*); e, fragment of a stele with an epitaph.—B. I. LEONARDOS, *Inscriptions of Amphiaraion* (cf. *Ἐφ. Ἀρχ.* 1884, p. 98–100, and 160, *Πρακτικά* 1884). i. This inscription contains directions for the priest of Amphiaraos, and for those who wish to offer sacrifice or to sleep in the temple. ii. This is a decree of the Oropians conferring a statue upon Hiero of Aigeira. Mention is made of the Achaian League, the Romans, and the great games of Amphiaraos. The date assigned is “Roman times before Christ.” iii. Dedication on the base of a statue set up by king Lysimachos. The artist was Sthennis, son of Herodoros, an Athenian. iv. There are here published, an inscription showing that the people of Oropos set up a statue of C. Cornelius Lentulus, by Herodoros, son of Sthennis, an Athenian; and a vote of proxeny for Philip, son of Alkimachos, a Macedonian. On the same stone were five other decrees of proxeny which are not published. v. A dedicatory inscription of a statue in honor of L. Cornelius Sulla Epaphroditus set up by the Oropians. The artist was Teisikrates son of Thoinias. The same stone bears a number of decrees of proxeny, which are not published. vi. The people of the Oropians dedicate to Amphiaraos and Hygieia a statue of Metella Caecilia wife of L. Sulla Epaphroditus. vii. The people of the Oropians dedicate to Amphiaraos (the statue of) Quintus Caepio Quinti f. Brutus. The artist is Thoinias, son of Teisikrates, a Sikyonian. On the same stone is a decree conferring proxeny upon Hermias, son of Nearchos, an Athenian. viii. Demokrite daughter of Theodoros dedicated to Amphiaraos (statues of) her father Theodoros son of Archilochos, and her son Theodoros son of Demainetos. The artist is Dionysios son of Ariston. ix. The people of the Oropians dedicate to Amphiaraos (the statue of) Appius Claudius Appii f. Pulcher. The artist is Agatharchos, son of Dionysios, a Boiotian.—TH. SOPHOULES, *Statuette from Sparta* (pl. 4). Publication of a marble statuette representing a youth. Nearly the whole of both legs and more than half of both arms are wanting. The nose is somewhat broken. The hair is long, and bound about the head with a tænia. The work is said to be a late copy of a bronze original. The original is assigned to the Peloponnesian school before Polykleitos, i. e. of the fifth century and before Ol. 85.—CHR. D. TSOUNTAS, *Earthen Utensil and Fragments of Pottery from Athens* (pl. 5). Publication (figs. 1, 1a) of a curious utensil with paintings on a white ground, described by F. Matz (Otto Jahn, *Europa*, p. 47 sq.). Also, publication of fragments of vases found on the Akropolis. Three fragments (fig. 2) are from a kylix which was adorned with a Gigantomachia in red figures on a black ground. Fig. 3 is a fragment

of a kylix with parts of two figures, perhaps *Kassandra* and *Aias*. Fig. 4 is a fragment of a vase ornamented with black figures upon a red ground. *Perseus* stands upon a base or step, holding in his left hand a bag which contains, according to the inscription, the *Gorgon's* head. *Perseus* has wings on his ankles. His head is wanting. Behind him sits an old man. Portions of other figures also are preserved.—N. NOVOSADSKÉ, *Inscription from Megara*. This inscription records the setting up of a statue by the senate and people to *Vitellia* daughter of *Sabinus*. A few corrections of the inscription published in the *Revue Archéologique* (1875, pp. 19–22) are added.—PLATE 6 represented a bronze *Satyr* from the collection of *Johannes Demetrios*.

**No. 3.**—CHR. D. TSOUNTAS, *Inscriptions from the Akropolis*. 1. A fragment of the report of the stewards of *Athena* and the other divinities, for the year of the archonship of *Eukleides*. This fragment seems to make it certain, that, 403 B. C., the stewards of the treasures of *Athena* were united in one board with the stewards of the other divinities. Only three names are here given, instead of the usual ten. 2. Two fragments of an inscription containing three decrees in honor of three officials, whose office is not determined. 3. A fragment of a decree in honor of a certain *Alexander*, whose influence with *Ptolemy Euergetes* had been of service to the Athenians. The probable date is between 250 and 243.—D. PHILIOS, *Inscriptions from Eleusis* (contin.). 23 (167). Inscription cut upon a pedestal. *Papia Onesime* dedicates to the goddesses (the statue of) her son *Titus Flavius Ateimatos*. 24 (168) and 25 (169) are also inscribed on pedestals. These (statues) are in honor of women, and dedicated to the goddesses. These women, as well as the *T. Flavius* of 23, had been initiated into the mysteries. 26 (178). Metrical inscription consisting of ten distichs inscribed upon the pedestal of a statue of the *Hierophantis* (*Epidote*) who initiated the emperors *Antoninus* and *Commodus*. The verses give a record of her family for six generations, beginning with *Eisaïos*, teacher of *Hadrian*. 27 (120). Inscription upon a pedestal. The senate of the *Areopagus* and the senate of the six hundred set up a statue of *C. Caecilius Casius*. 28 (165). Inscribed upon the pedestal of a statue of *Appia Annia Regilla Atilia Caucidia Tertulla*, daughter of *Appius*, consul and pontifex, wife of *Herodes* of *Marathon* consul and exegetes (*Herodes Atticus*), set up by her husband.—B. I. LEONARDOS *Inscriptions of Amphiarion* (contin.). 10. The name *Pythodoros* inscribed upon a column. 11. Two letters, only, Π Ο. 12. Upon a marble slab are the names *Ἀμφιαρίων*[ο] *Ἀμφιλόχο*[ο] *Ἐ[ρμού]*?. 13. Upon a pedestal are two inscriptions: the dedication by the *Oropians* to *Amphiaraios* of (a statue of) *Q. Fufius Calenus*, and a decree of proxeny for *Philleas* son of *Agasilas* an Athenian.—S. N. DRAGOMES, *Inscriptions from the Megarid*.

Five very fragmentary inscriptions, one from Eleutherai, two from Megara, and two from Aigosthena.—S. A. KOUMANOUDES, *Attic Inscriptions*. The first of these, given in facsimile and in small text, is a sixth small fragment of the record of proceedings against the Hermokopidai (cf. C. I. A. 274-277 and Supplem. vol. iv. fasc. 1, p. 35; also Dittenberger, *Sylloge*, p. 72-77). The second is given only in facsimile, and consists entirely of numerals (cf. C. I. A. 545). The third, given in facsimile and small type, contains the first words of a decree. The next three inscriptions are upon three sides of one stone, the fourth side of which has been roughly broken off. They are given in facsimile and small type. The longest and oldest inscription is ascribed to the last part of the fourth century B. C. It contains an account of naval properties. It may be part of one of the naval inscriptions in C. I. A. vol. II. part II. This inscription is fragmentary, for the stone has been badly broken, and on one side cut and shaped for some other than its original use. The inscriptions on the two other inscribed sides are of late date (first or second century after Christ), and consist of proper names. Finally, an inscription is published in small type consisting only of the heading of a decree. The date is the archonship of Nikodemos (cf. C. I. A. II. 471).—D. PHILLOS, *Discoveries in Eleusis* (pls. 8, 9). The specimens of sculpture found at Eleusis have been few and unimportant. On the other hand, fragments of pottery have been found which give, in a nearly complete series, the various stages of ceramic decoration from the Mykenian period to that of the red-figured vases. Plate 9 gives (Nos. 5-9) five small vessels of peculiar shape, furnished with holes for hanging them up. These are probably censers. No. 10 of the same plate is a fragment of a vase formed and painted in imitation of sea shells. About the mouth is the inscription *Φωτίας ἐποίησεν* (cf. Klein, *Meistersignaturen*, p. 78). No. 11 is a fragment of a vase with black ground, adorned with an owl in relief, painted in imitation of nature. Nos. 12 and 12a are fragments of a gigantomachy painted in black (and purple) upon an orange ground. Nos. 1, 2 and 3 are thin plates of gold. The five pieces given as No. 3 are ornamented with bead and wire work in conventional patterns. The two larger plates (Nos. 1 and 2) are of repoussé work, and are very similar to one another. Both are adorned with stripes of conventional patterns, alternating with stripes which display animals in conflict with each other or with men. These plates were intended to be nailed upon wood. Nos. 1-3 of plate 8 reproduce fragments of a vase, upon the reddish ground of which are represented Amazons preparing for battle. The figures are black, only the nude parts being white. Violet-color is also sparingly employed. No. 4 of the same plate reproduces a fragment of a plaque. The style of decoration is archaic, and the work careless.



The figures are preserved from the waist up. Two females with high head-dresses stand opposite one another. The figures are black, though the nude parts are white, and some violet is used. The ground is orange.

—**MISCELLANIES.** S. N. DRAGOUMES, *Observations upon a certain decree of the people* (*Ἀθήνασιν* III (1875) p. 687; C. I. A. II. i. 578).—A. S. KOUMANOUES, *An Italic Dekalitron*. An ancient weight is published with the inscription *Δεκάλιτρον Ἰταλικόν*.—**PLATE 7** represents fragments of Corinthian pottery with black figures. The article belonging to this plate is to follow in the next number of the *Ἐφ. Ἀρχ.* H. N. FOWLER.

**GAZETTE ARCHÉOLOGIQUE.** 1885. Nos. 7-8.—P. MONCEAUX, *Excavations and archaeological researches at the Sanctuary of the Isthmian Games* (contin). The writer here notices the monuments outside the precincts of the sanctuary and in the sacred woods: the three sacred ways; the stadium on the S. side, some of whose marble steps still remain in place; the theatre on the W. side, forming a semi-circle with a diameter of 50 metres, of Roman construction; remains of temples in the sacred valley, of buildings of the city, and of aqueducts; the defensive wall. A careful examination of the vestiges of Nero's attempt to cut the Isthmus, shows that it was skilfully planned and energetically carried on for some months.—S. REINACH, *A ram-bearing youth* (pl. 25). This bronze statuette, found at Rimat, near Saïda (Tunisia) and belonging at present to the Bibl. Nationale, is of rude workmanship and must be attributed to the II or III century A. D. The writer is inclined to see in this and similar figures, not a mythological personage, but a mere shepherd.—E. LEFÈVRE-PONTALIS, *Stone crosses of the XI and XII centuries in the north of France* (pl. 26).—A. RAMÉ, *Explanation of the bas-relief of Souillac* (pl. 27). *The Legend of Theophilus*. This Romanesque church, one of the most remarkable of the southern group of churches with cupolas and pointed arches, is singular for its immense bas-relief placed on the inside of the façade. This composition has never been satisfactorily explained. M. Ramé pronounces it to represent four episodes of the Byzantine legend of Theophilus of Adama (Kilikia): when he sells himself to the devil; when the devil claims him; when he implores the assistance of the Virgin; and his deliverance by an angel. On the pilasters the writer finds some Old Testament subjects, and, in the four single figures, Isaiah, Joseph, S. Peter, and S. Benedict (or Martin). He relates this sculpture to that of Moissac and Beaulieu.—E. BABELON, *A Roman sarcophagus found at Antioch* (pls. 28, 29). It was found at Antioch by Capt. Marmier, and, though it appears to belong to the II century of our era, preserves, in both technique and subject, reminiscences of earlier Oriental art.—L. COURAJOD, *Jacques Morel, a Burgundian sculptor of the XV century* (pl. 30 and 2 figs.).



The kings and nobles of France considered the erection of a monument for themselves, during their lifetime, one of their most important acts: the writer sketches the development of these monuments from the XIII to the XVI century, especially in Burgundy. The Burgundian type of Dijon was followed in a great part of France. In 1448, Charles, duc de Bourbon, charged Jacques Morel of Montpellier to erect a monument for him and his wife Agnes de Bourgogne: "it is absolutely a chef-d'œuvre . . . and the most perfected type of Burgundian sculptural art." The figures are broad and noble, and the execution finished, without minuteness (pl. 30). By Jacques Morel was also the mausoleum of René of Anjou, which he left unfinished at his death in 1459.—H. THÉDENAT and A. HÉRON DE VILLEFOSSE, *The treasures of silver-ware found in Gaul* (contin.). (8 figs.). Continuation of the description of the treasure of Montcornet.

Nos. 9-10.—E. POTTIER, *Lekythoi with white and with bistre background at the Cabinet des Médailles* (pls. 31, 32). A supplement to the author's *Étude sur les lécythes blancs attiques à représentations funéraires*, published in 1883: it contains a catalogue of the vases in the *Cabinet des Médailles*. That illustrated on pl. 31, representing the meeting of a man and woman of middle age (quite unusual) at a tomb, is of considerable artistic excellence.—A. ODOBESCO, *Silver cup of the goddess Nana-Anat* (pl. 33). A cup with a female figure seated on a peculiar animal, in the centre, and, around her, eight figures adoring two symbols of Ormuzd. In this paper the writer seeks to identify the animal as a camelopard or giraffe, which would symbolize the active and passive principles combined in the goddess Anaitis, seated on his back.—L. DE LAIGUE, *Funerary Genius: a marble discovered in Rome* (pl. 34). A beautiful fragment belonging to the early Empire, found in the gardens of Sallust.—G. DURAND, *A cross from the Abbey of the Paraclete, preserved at the cathedral of Amiens* (pl. 35). It is a work of the XIII century of remarkable beauty for its filigree work, its nielli, and its medallions.—CH. DE LINAS, *The diptych of St. Nicaise in the treasury of the cathedral of Tournai* (pl. 36 and 19 figs.). On the obverse, is (1) Christ in a *vesica piscis*, (2) the Lamb in a circle supported by two angels, (3) the Crucifixion: on the reverse, St. Nicaise with two acolytes. It is a poor and inartistic production of the beginning of the XI century.—H. THÉDENAT and A. HÉRON DE VILLEFOSSE, *The treasures of silver-ware found in Gaul* (pl. 37). (contin. and end).

Nos. 11-12.—E. LE BLANT, *Introduction to the study of the Christian sarcophagi of Gaul* (pls. 38-41). This essay will form the introduction to the writer's great work on the sarcophagi of Gaul, which is soon to be

issued. Some years ago, M. le Blant published an important volume on the early-Christian sarcophagi of Arles: the present study he devotes to those of the rest of Gaul. The questions discussed in this introduction are: the use of old Christian and even pagan tombs in times of decadence; the historical reminiscences and legends attached to these rich tombs; the singular explanations often given of their bas-reliefs; their variations of type; their age; and the preservation of early types in Merovingian times.—L. COURAJOD, *A sculpture by Antonio di Giusto Betti at the Louvre* (pl. 43). This head of a youthful warrior, evidently by an Italian master of the xv cent., is satisfactorily proved by the writer to be the work of Antonio di Giusto Betti (b. 1479—d. 1519), who worked at the castle of Gaillon where this bust in alto-relievo was executed (cf. head of Apostle on tomb of Louis XII at St. Denis).—L. COURAJOD, *Some bronze sculptures by Filarete* (first article) (pl. 44). This small reproduction in bronze of the well-known statue of Marcus Aurelius, in the Royal collection at Dresden, is of singular interest. In the first place, it has a long inscription showing it to be by Filarete and to date from 1465, and will lead to the identification of a number of similar works as by the same artist; in the second place, it shows that *painted enamels*, the invention of which has always been attributed to the French school of Limoges, were already executed in Italy in 1465.—E. MÜNTZ, *Inedited frescos of the Papal palace at Avignon and the Certosa at Villeneuve* (first article). A review of some of the works of art executed under the pontificate of Clement VI. The frescos of the two chapels (of S. Jean Baptiste and S. Martial) in the tower of Saint John seem to have been commenced in 1343. The painted glass windows were executed in 1345–6.—A. CHABOUILLET, *Study on some cameos of the Cabinet des Médailles* (pl. 42). 1. This paper illustrates a cameo attributed to Seleukos I, Nikator, the finest among those donated in 1862 by the duc de Luynes. It is hardly possible to decide whether this is the head of a god, a hero, or a king, but it was executed, in all probability, at Alexandria in the Ptolemaic period.—P. MONCEAUX, *Excavations and archaeological researches at the Sanctuary of the Isthmian games* (end). An account (1) of the ruins of a very ancient city, (2) of the *diolkos*, and (3) of the necropolis of Korinth. The plan of this ancient city, which the writer identifies with Ephyra, can still be ascertained with accuracy: the city was situated on a hill, and was cut entirely out of the rock,—streets, foundations, house-walls, furniture. The supremacy of the Isthmus seems to have passed from Ephyra to Korinth at the time of the Dorian conquest. The necropolis of the latter extends over the entire plain around the city.

A. L. F., JR.

**JOURNAL OF HELLENIC STUDIES. Vol. VI. No. 1. April, 1885.**—**E. A. GARDNER, *A Statuette representing a Boy with a Goose*** (pl. A and fig. 51). An autotype reproduces a silver statuette, in the British Museum, which belongs to a numerous class representing a boy, in various attitudes, holding or struggling with a goose; the original conception of which was referred by Jahn in 1848 to a work of Boethos (whose probable date is the beg. of Hellenistic period) mentioned by Pliny (xxxiv. 84). This publication establishes Jahn's conjecture on firmer ground, by giving a fixed date for the existence of one specimen of the type, inasmuch as it was found near Alexandria together with coins which prove that it was buried in the early years of Ptolemy Euergetes, or about 240 B. C. Mr. G. enumerates 52 examples of this *genre* subject and classifies them under 5 types.—**G. B. BROWN, *Sepulchral Relief from Attica at Winton Castle***. Plate B figures a pretty stele, crowned by an anthemion-ornament, and bearing the standing figure of a maiden gazing at a small image in her right hand. The architrave above her head is inscribed, *Aristomache*.—**JANE E. HARRISON, *Odysseus and the Sirens—Dionysiac Boat-Races—A Kylix by Nikosthenes*** (XLIX, plate of the kylix in colors). The kylix belongs to the black-figured class, and depicts on each side two galleys sailing nearly neck and neck, and near each handle a Siren. This is maintained to be the type from which in the red-figured class the myth of Odysseus and the Sirens is pictorially developed, the artist employing the forms and decorations of a purely *genre* conception, for the purpose of enshrining the myth. The earlier type, as on this kylix of Nikosthenes, portrays a boat-race, and a boat-race, too, as in general where galleys are found on black-figured vases, in honor of Dionysos. Even the eyes so frequent on this class of vases should stand symbolically for Dionysiac boat-races. For the prevalence of boat-races among the Greeks, appeal is made to Prof. Gardner's two articles on the subject in vol. II. of the *Journal of Hellenic Studies*: [where, however, no proof is produced of their existence at as early a period as the black-figured vases. But such proof does exist. The speaker in the twenty-first Oration of Lysias (§5), while enumerating his services to the state, mentions his winning a victory with his trireme at Sunion in a contest on which he spent 15 minae; and it is to this festival, a *pentacteris*, with its naval contest, that Herodotos is believed to refer (vi. 87), when he speaks of the capture of the *theoris* by the Aiginetans, towards the beginning of the fifth century B. C. A. C. M.].—**A. MICHAELIS, *Ancient Marbles in Great Britain. Supplement II.*** (pls. c. LVI, LVII: 2 figs.). A small plate figures the Attic bull, once the property of Cockerell, and two large plates are devoted to the best reproduction now possible of the famous Korinthian Puteal which Dodwell describes with so much fervor in his

*Classical Tour* (II. pp. 200-202). These sculptures were taken first to Zante, and thence to London, where they remained for a long time in the possession of Lord Guilford; but they have since disappeared, and one object of the present publication is the hope of exciting an interest in them which may lead to their discovery.—F. IMHOOF-BLUMER and P. GARDNER, *Numismatic Commentary on Pausanias: Megarica, Corinthiaca* (pls. L-LV). This article, accompanied by six large plates of coins, is the most important and valuable contribution to this volume. It undertakes to identify the objects of art and worship mentioned by Pausanias in Megaris, Korinthia, Sikyon, Phlious, Kleonai, Argolis, etc., so far as possible by the study of coins. [The success which has crowned their efforts in so many cases shows what a fruitful field lies here for the illustration of that author. It was a happy thought that inspired both these numismatists at once and independently to enter upon this study, and it is to be hoped that they will pursue the subject until the whole of Pausanias is treated in this way. We may also express the hope that some one as competent will soon perform the much needed task of placing in the hands of the archæologist an edition of Pausanias which will be a proper representative of the knowledge of to-day. A. C. M.J.]—L. R. FARNELL, *The Pergamene Frieze* (concluded from vol. iv). A painstaking study of the Frieze as known up to the present time, and one which should be read before the sculptures themselves or complete photographs.—E. A. GARDNER, *Inscriptions copied by Cockerell in Greece*. At one of his lectures Mr. Newton asked his auditors to let him see any MS. collection of inscriptions they knew of in private possession, and soon received two volumes here treated of, which are copies. The originals have been lost, but this copy is a very careful one, and corrects many things in the *Corpus*, besides furnishing about 50 inscriptions still unpublished, the entire collection comprising 240, the first 60 of which are treated in this article. None of those that are unpublished appear of special importance.—L. CAMPBELL, *The Aeschylean treatment of Myth and Legend*. Professor Campbell here, regarding Aischylos as the patriot and the Eleusinian devotee, seeks to establish the intention of the poet in the *Eumenides* and *Prometheus*. Most great poetry, idealizing and delighting in contrast, has found its ideal in the distant past or future, and is visionary, reactionary, or pessimistic. Aischylos, however, like Spenser, found his ideal realized in the present, and delighted to contrast it with a time when the world had not yet been reduced to order, but a primeval chaos prevailed in which the elemental passions clashed and raved, and even the Furies might be convicted of passing the bound, and Zeus had not yet learned justice.—J. B. BURY, *Notes on* (1) *the Trilogy*, (2) *Certain Formal Artifices of Aeschylus*. Tragedy took the form of the Trilogy in

obedience to the law that was enunciated by Aristotle in his *Poetics*, that a work of art must be a whole, with a beginning, a middle, and an end; as the plastic group should have a centre and two symmetric sides, likewise in the Oresteian and Promethean trilogies are inculcated *ἔργον*, *πάθος*, and *μῆθος*. The formal artifices of the poet are especially his indication of responsions of thought by responsions of phrase.—C. SMITH, *Early Paintings of Asia Minor* (4 figs.). The characteristics of the rare examples of undoubted vase-paintings of the early period from Asia Minor are here described, and the writer seeks to show that an amphora from Rhodes belongs to this school which seems to have existed in the vicinity of Klazomenai.—P. GARDNER, *Amphora-handles from Antiparos*. Of seven amphora-handles brought from that island by Mr. Bent not one can be assigned with certainty to either of the three great centres of this manufacture, Rhodes, Knidos, or Thasos.—J. T. BENT, *On the Gold and Silver Mines of Siphnos*. These mines, mentioned by Herodotos and other ancient writers as extremely rich, were explored by Mr. Bent in two places, at the N. E. and N. W. parts of the island. They form huge caves with labyrinthine windings, and in the vicinity of one on the east side, close to the sea, are hollows, supposed to have been used for smelting, and similar ones may be seen under water at a distance from the shore, showing that there has been a subsidence of the land since they were in use, perhaps referred to by Pausanias (x. 11, 2).—W. WROTH, *A Torso of Hadrian in the British Museum*. This Torso from Kyrene is identified by comparison with another from Krete now in the museum at Constantinople, published with a photograph in the *Gazette Archéologique* for 1880. Mr. Wroth calls attention to the close connection existing between Krete and Kyrene, even as early as the IV century B. C., when the Kretans used Kyrenaic coins as *flans* on which to restrike Kretan types.—W. M. FLINDERS PETRIE, *The Discovery of Naukratis*. This is a short report of the first year's work on this site, which is about half a mile long. At the north end of the town stood the temenos and temple of Apollon, as proved by numerous bowls with dedicatory inscriptions, the first temple having been destroyed probably during the Persian invasion. South of this lay the *agora*, or possibly the *palaistra*, a large area without ruins, bounded by walls on three sides. Next followed the town with narrow streets. East of the *agora* was the potters' quarter, south of these the iron-smelters, and to the west the scarab factory where glazed pottery scarabs were made for export, as shown by the hieroglyphics being all blundered. Only the names of Psamtik I. and II. appear on them. The temple of Aphrodite was in the south-western part of the town. In the area of the town, quantities of pottery of archaic types, from the so-called Phœnician-Greek to the ordinary Greek pottery, have been

found. A large enclosure 600 ft. square, to the S. of the town, appears to have been a large temenos with treasury and storehouses of brick, in which Ptolemy II. erected a large stone building. A. C. MERRIAM.

**REVUE ARCHÉOLOGIQUE.** 1885, II. **Sept.-Oct.**—M. DELOCHE, *Studies on some seals and rings of the Merovingian period* (cont.). XIII. *Seal-ring of Aurea* (1 fig.). A bronze ring with monogram deciphered as AVREA. Mention is made of an abbeß of this name at Paris in the year 666 A. D., and of another at Amiens about 789 A. D. XIV and XV. *Seal-rings of Melle* (Deux-Sèvres) (2 figs.). Two bronze rings found near Melle in 1883. The monogram of one is deciphered as + BENIGNVS, a name common in the Gallo-Frank period, and borne by at least fifteen ecclesiastics of rank between the II and VIII centuries.—P. BATIFFOL, *Canones Nicaeni pseudepigraphi*. The text of a hitherto inedited XIV century MS. from the library of San Marco (Marcianus, 498), containing a modified version of the Nicene Creed with anathemas against the faith of Sabellios, Photinos, those who do not acknowledge the resurrection of the flesh, and against all heresies contrary to the Nicene symbol, and especially against the "atheistic" faith of the Arians. Then follow a series of moral and religious precepts, in general of a negative and ascetic character.—ED. DROUIN, *Coins with inscriptions in Pehlvi and Pehlvi-Arabie* (cont.) (pl. XXIII). A description of Indo-Pehlvi coins, of which there are several varieties from Khorâssân, Multân and Zaboulstân. A large number of coins in imitation of the Sassanid type, with fire-altar and Buddhist emblems and pseudo-Pehlvi inscriptions, are found in the valleys of the Kâboul and the upper Indus.—H. GAIDOZ, *The Gallie Sun-god and the symbolism of the wheel* (cont. and end) (1 fig.). The association of the thunderbolt with the wheel in figured monuments is explained from early and wide-spread beliefs connecting the thunderbolt with the sun. The Gallie Sun-god was recognized by the Romans as Jupiter, not merely from his character of the thunderer, but as ruler of the heavens. Instances are cited of many Gallie surnames of Jupiter, and additional evidence from texts and figured monuments to support the thesis, that the Gallie god of the wheel was the Sun-god identified by the Romans with Jupiter.—DR. RENÉ BRIAU, *Introduction of Medicine into Latium and Rome* (cont. and end). Practice of medicine was introduced into Rome not by Greeks but by the Etruscans. The religious rites of the haruspices led to a knowledge of general anatomy. Many anatomical and pathological terms of early Latin origin still remain in use. Etruscan medical practice is referred to implicitly by Dion. Halik. *Antiq. Rom.* I. c. LXX; Livy, *Hist.* I. c. XLI; Valerius Max. II. c. IV.—ANDRÉ LEVAL, *Supposed letter of Mohammed IV to Leopold I, Emperor of Germany, and*



his reply. Two Greek manuscript letters, found in the archives of the monastery of St. Louis at Constantinople, are here edited in the Greek and translated with annotations.—CHARLES NORMAND, *Ancient metallic architecture, or the role of metal in ancient constructions*. A résumé of the state of our knowledge on this subject, and an appeal for further information.—DIEULAFOY, *Mission to Susiana: Note of the discovery of 7 new inscriptions on the tomb of Darius* (pl. xxiv). The long inscription on the tomb of Darius at Naksh-i-Rustam has been photographed by MM. Babin and Houssaye, and seven new smaller inscriptions were found beneath a covering of stucco, the first instance of engraved cuneiform characters retaining traces of color. A photographic reproduction of an Elamite bas-relief at Mal-Amir is presented.—H. GAIDOZ, *The art of the Gallic Empire* (pl. xxv). Description of a Gallic *situla* found in an Etruscan tomb on the Arnoaldi estate at Bologna. The description is based on the publication of Prof. Brizio, *Sulla nuova situla di bronzo figurata trovata in Bologna*. Modena, 1884.

Nov.-Dec.—E. REVILLOUT, *A farm-lease of the time of Amasis, and the condition of property at this period* (pl. xxvi). The institution of private property in land, which existed during the Ancient Empire, was overthrown by Rameses II. Land now belonged to the king, the priests and the newly established military caste. This distribution of property was modified, not destroyed, by the code of Bocchoris: its influence is seen in the farm-lease of the time of Amasis, and is felt even to the present day.—DR. VERCOUTRE, *Sacerdotal practice of medicine in Greek Antiquity*. An attempt to prove that the priests of Asklepios were not mere charlatans, but were masters of hygiene, and gave many prescriptions of a rational and scientific character.—J. MÉNANT, *Intaglios of Asia Minor* (22 figs.). In the light of the rock-sculptures of Asia Minor, several seals and cylinders are described and classed as Hittite. Care must be taken to distinguish these Hittites of Asia Minor from the Biblical Hittites, the descendants of Heth.—H. GAIDOZ, *The Gallic Sun-god and the symbolism of the wheel: Post-scriptum*.—M. DELOCHE, *Studies on some seals and rings of the Merovingian period* (cont.) (3 figs.). XVI. A silver fibula, which served as a seal, with monogram deciphered as + SI(gillum) or SI(gnum) SISTO (for SIXTO).—P. CHARLES ROBERT, *Alternate dispersion and centralization in the coinage of money in Gaul, from the Gallic to the Carolingian period*. During the Gallic period, money was coined at many places in Gaul, first according to Greek and then to Roman models: under Roman rule, we find the centres of coinage reduced to three: in the Merovingian period, many centres and great variety of coins: under Charlemagne, again centralization.—SALOMON REINACH, *Chronique of the East* (9 figs.). A very comprehensive summary of the work of Mr. Ohne-

falsch-Richter in Kypros since 1880, at Kition-Larnaka, Salamis, Soli, Kourion-Episkopi, Chytroi-Voni, Achna, Marie, Nikosia, Idalion-Dali, Amathous, Marion and Alambra.—PAUL TANNERY, *The ΟΥΓΚΙΑΞ-ΜΟΞ ΥΔΑΤΟΣ*. The text, translation, explanation and critical notes on a fragment of Hero of Alexandria, containing information on the Greek method of calculating the volume of water-pipes.

1886, I. Jan.—CLERMONT-GANNEAU, *A Phœnician inscription from Tyre* (pl. I). This Phœnician inscription is of especial interest as being the first found at Tyre. It was discovered by M. Löytved, and was, together with a part of the monument on which it was engraved, bought by the Louvre. Only the left portion remains, and even that is in an unsatisfactory condition. It commemorates an important work in which the *suffetes* (magistrates) of Tyre took part: perhaps the construction of a reservoir. The writer attributes the inscription to the Greek Ptolemaic period after the autonomous constitution given in 274 to the people of Tyre by Ptolemy Philadelphos.—L. COURAJOD, *The bronze Diana of the Castle of Fontainebleau* (pl. II). The bronze Diana of Marly, executed in 1684 by the Keller brothers for Louis XIV, entered the Louvre in 1794, and was mistaken for the Diana of Fontainebleau which had been executed for Henry IV in 1602 by Barthélemy Prieur, and all traces of which had been lost after 1801. M. Courajod re-establishes the identity of the two, both of which are copies of the marble Diana of the *Salle des Antiques*.—M. DELOCHE, *Studies on some seals and rings of the Merovingian period* (cont.). XVII. Bronze ring of Mesnil-Bruntel (Somme) with monogram SI(gnum) or SI(gillum) FELICIE, found August 21, 1885. Though we have no example of the name Felicia, that of Felicius is quite frequent.—DR. VERCOUTRE, *Sacerdotal practice of medicine in Greek Antiquity* (cont.). An answer to the objection that a great number of the remedies prescribed by Asklepios are evidently absurd.—PAUL TANNERY, *The astronomical cubit and the ancient divisions of the circle*. He contests the entire dependence of the Greeks on Babylonian astronomy. The writer's hypotheses are: (1) that this unit, 1/180 of the circumference, preceded among the Greeks the division of the circle into 360°; (2) that the division into 360°, applied to the circle in general, is really due to Hipparchos, and coincides with his invention of trigonometry; (3) that the Chaldeans had this division of 360 only for the zodiac, and employed other analogous but different divisions at the same time.

ALLAN MARQUAND.

## BOOKS RECEIVED.

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- R. de Lasteyrie.** Jules Quicherat. Sa vie et ses travaux. 8vo, pp. 42. Paris, 1883, *Imp. Nationale*.
- O. Marucchi.** Description du Forum Romain et Guide pour le visiter. Traduction Française revue et augmentée par l'auteur et mise au courant des dernières découvertes. Avec deux planches. 12mo, pp. 208. Rome, 1885, *Loescher*.
- J. Ménant.** Recherches sur la Glyptique Orientale. Seconde partie: Cylindres de l'Assyrie, Médie, Asie-Mineure, Perse, Égypte et Phénicie. Rl. 8vo, pp. 271, with 5 plates and 266 figures. Paris, 1886, *Maisonneuve*.
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- Cyrus Thomas.** Notes on certain Maya and Mexican Manuscripts. (Extract from the third annual Report of the Bureau of Ethnology.) 4to, pp. 65, with four plates and figures. Washington, 1885, *Government printing office*.





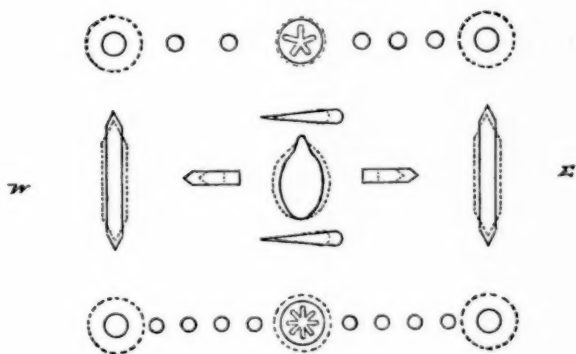
HITTITE MONUMENT AT EPLATÛN-BUNAR.

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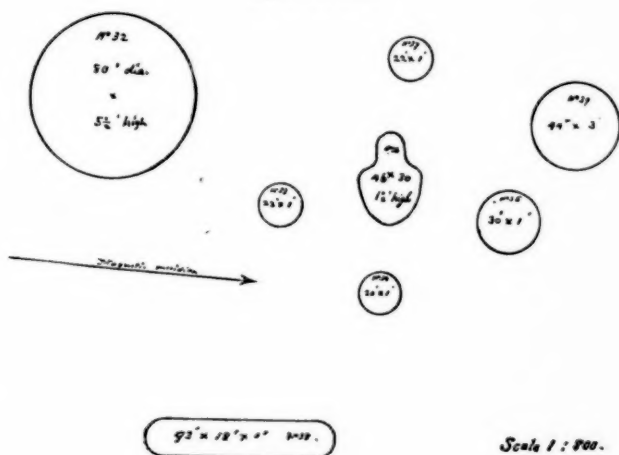


Figure 1. Fiction.



Scale 1 : 100.

Figure 2. Fact.



Scale 1 : 100.

MOUNDS OF DE-COO-DAH.